Lectures
ON THE
PHYSIOLOGICAL PATHOLOGY OF THE BRAIN.

Delivered at the Royal College of Physicians of London, July, 1876,

BY C. E. BROWN-SÉQUARD,
M.D., F.R.S., F.R.C.P. LOND., ETC.

LECTURE II.—PART V.

ON PARALYSIS LIMITED TO A LIMB OR TO SOME MUSCLES.

Paraplegia caused by injury to the brain in dogs—Rapid appearance of symptoms of meningo-myelitis after a burn of the brain in a dog—Paraplegia due to disease of the anterior lobes, of the corpora striata, and the optic thalami—Absence of cases of paraplegia caused by disease of the pretended psycho-motor centres of the legs—Considerable frequency of cases of paraplegia allied with or due to diseases of the crura cerebri, the pons Varolii, the medulla oblongata, and the cerebellum.

THE conclusions I have just given[1] apply as well to paralysis of the lower limbs and to the pretended centres of motion of those limbs as to a loss of movement and to the so-called psycho-motor centres of the upper extremities. I have shown that one of the abdominal limbs, as well as one of the thoracic limbs, can be paralysed from disease in the anterior, the middle, or the posterior lobes, or in the optic thalamus, the corpus striatum, the crus cerebri, the pons Varolii, the medulla oblongata, or the cerebellum. I have shown, also, that the paralysis of a lower limb can be produced by disease on the side of the lesion, and that it can appear also from disease in both sides of the brain. The fact that from a brain disease there can appear a loss of voluntary movement in one lower extremity—i.e., hemiparaplegia—the upper limbs remaining under the power of the will, is of great importance, as I will show by and by in the discussion of the question whether paraplegia—i.e., a double hemiparaplegia—can be produced by disease of the brain.

I announced in the preceding lecture[2] that later on I would mention many cases of paraplegia apparently due to disease occupying parts of the two sides of the motor ganglia or of the base of the brain or of the cerebellum. I will now fulfil that promise, and will add to this mention of cases remarks on the importance of some of the facts I have already spoken of, in which paraplegia seems to have been caused by disease in one side of the brain or in one side of the cerebellum.

Experiments on dogs and other animals leave no doubt at all as to the possibility of the production of a paralysis of the abdominal limbs from a lesion of the brain. Already, long ago, Saucerotte[3] had seen paraplegia supervening in dogs from a lesion consisting in a transversal section of the two anterior lobes of the brain. I have seen, chiefly in dogs, after a cauterisation of the surface of the middle and posterior lobes on one side, a paralysis of the two hind limbs.[4] From the effects observed in his experiments, Saucerotte concluded that the anterior lobes of the brain contain the centres for the voluntary movements of the abdominal limbs. Many facts might be considered as giving support to this view, which is in such radical opposition to that of the living localisers. Cayol[5] has seen a case of paralysis, chiefly of the lower limbs, in a patient who had a tumour of the right anterior lobe. Esquirol,[6] in a case in which there was only paraplegia, found a cancer in the two anterior lobes. In a case of Malherbe's,[7] paraplegia was also the prominent symptom caused by or allied with cancer of both anterior lobes. Serres[8] found softening of the anterior and inferior radiations from the two corpora striata in a case in which paraplegia was the form of paralysis existing. In a case of softening of the two anterior lobes, with inflammation of the meninges, caused by a blow on the forehead, Orillard[9] found amnesia and weakness of the sphincters and of the lower extremities.

In none of those cases was the spinal cord examined, and it is quite probable that in at least one or two of them it would have been found diseased if carefully examined; but there were features in some of those cases, and especially in Orillard's, rendering it very probable that paraplegia had been caused by the cerebral disease shown by the autopsy. Similar remarks apply to the following cases, in which paraplegia was observed allied with or caused by disease of the corpora striata or the optic thalami. In a case in which there was a simultaneous appearance and development of difficulty of speech and paraplegia, Prof. Romberg[10] found the left corpus striatum atrophied. In a most remarkable case, carefully recorded by Gintrac,[11] there was no paralysis except of the lower limbs and of the bladder.[12] Both corpora striata, especially the right, were considerably softened. In a case of Dr. Boyd's[13] there was spasmodic rigidity and paralysis of the two lower limbs, with softening of both corpora striata. In a case of Guillemin's[14] there was paraplegia, and in the upper limbs conservation of movement, although there was a clot of blood between the corpus striatum and the optic thalamus on the two sides. In a case of hypertrophy of the corpora striata, especially the right, and also of the pons Varolii and the crura cerebri, Sims[15] mentions paraplegia among the prominent symptoms. Pinel[16] gives a case in which paraplegia was the only paralysis, although the two optic thalami and the two corpora striata were reduced to a blackish pultaceous matter. In a case in which the optic thalami were found of a deep yellow tinge and softened, with two ounces of clear serosity in the lateral ventricles, Dufour[17] noticed at first a difficulty in walking, then paraplegia, and ultimately a paralysis also of the upper limbs.

To the facts just related I must add a most important case in which, besides a lesion of the corpora striata and optic thalami, there was disease of other parts. Demange[18] has shown to the Paris Anatomical Society the nervous centres of a boy eight years old, who had suddenly been attacked with incomplete loss of movement without anæsthesia in the lower limbs, and without any paralysis of the face and upper limbs. Numerous granulations were found in the ventricular membrane over the optic thalami and corpora striata, and in the floor of the fourth ventricle. In the posterior horn of the left lateral ventricle there was a tumour the size of a walnut. There was no alteration whatever of the spinal cord, except a very slight congestion. Before passing to other parts than the so-called sensory and motor ganglia, I will mention the following two cases. A patient of Rostan's,[19] who had been suffering from rigidity

---

[1] See THE LANCET of Feb. 3rd, 1877, p. 156.
[2] See THE LANCET of Sept. 30th, 1876, p. 454.
[3] Prix de l'Académie de Chirurgie, vol. iv., p. 310.
[4] Almost invariably, then, there are spasmodic contractions in the muscles of the trunk and abdominal limbs. In one remarkable case, the dog having been shown to the Biological Society of Paris a few hours after the operation, my friend Dr. Hayem, not knowing what had been done, gave the opinion that the poor animal was labouring under meningo-myelitis in the dorso-lumbar region. He was perfectly right in so far as this: all the symptoms of that affection in that region existed in a very high degree. But the disease did not exist; what had taken place was simply a change in the activity of the nerve-cells of the spinal cord, owing to which the paralysis, the spasmodic contractions, &c., had appeared.
[5] Quoted by Bouillaud in Traité Clinique et Physiol. de l'Encéphalite (Paris, 1825), p. 204.
[6] Quoted by Auzoug in Annales Médico-Psychol., 3e série, 1858, vol. iv., p. 521.
[7] Thèse de Paris, No. 320 (1833), p. 21.
[8] Traité d'Anatomie comparée du Cerveau, vol. ii., p. 682.
[9] Thèse de Paris (1831), No. 15, p. 21; quoted by Gintrac, loc. cit., vol. vi., p. 293.
[10] Diseases of the Nervous System, translated by Dr. Sieveking, vol. ii., p. 425.
[11] Loc. cit., vol. ix., p. 361.
[12] Many persons might think that paralysis of the bladder in that case, as in other cases of paraplegia allied with a brain lesion, implies that the spinal cord was diseased. As this last part was not examined, of course it is not certain that it was free from disease, but it is wrong to suppose that the paralysis of the sphincter of the bladder proves that the brain was not the only nervous centre diseased, as I will soon show that the anal and the vesical sphincters can be paralysed without a spinal organic affection, and merely in consequence of disease of the brain.
[13] Medico-Chirurgical Transactions, vol. xxxix., p. 62.
[14] Thèse de Paris (1818), No. 100, p. 7; quoted by Gintrac, loc. cit., vol. vii., p. 222.
[15] Medico-Chirurgical Transactions, vol. xix., p. 347.
[16] Journal de Physiologie de Magendie, vol. vi., p. 61.
[17] Archives Générales de Médecine, &c. (1828), vol. xvii., p. 228.
[18] Bulletins de la Société Anatomique (1874), p. 503.
[19] Recherches sur le Ramollissement du Cerveau, 2nde édit., p. 258.

of the right arm, due to an old effusion of blood on the surface of the left hemisphere, was attacked with almost absolutely complete paraplegia, followed by coma, from a new hæmorrhage in cysts over the left hemisphere, together with alterations of the optic thalamus and the surface of the corpus striatum, and softening of the internal parts of the right hemisphere. Abercrombie says[20] that in one of Dr. Cheyne's cases there were three distinct extravasations of blood—one in the substance of each corpus striatum, and in the third and fourth ventricles. "The symptoms were apoplectic, with some convulsion, and after some time paraplegia." A case of Laborde's[21] must also be mentioned now, as the lesions were in the lateral ventricles. The patient was first attacked with delirium and gradually increasing paraplegia, to explain which there was nothing but old marks of effusion of blood in the upper wall of the right ventricle and the lower wall of the left.

It is extremely remarkable that if we take all the cases of paraplegia allied with or caused by disease of the brain, we find that in almost all of them the disease was elsewhere than in the convolutions or the white substance of the middle or of the posterior lobes. I do not know of even one case in which there has been paraplegia allied with disease of the posterior lobes; and as regards the middle lobes all I know is that in one case of paraplegia with convulsions and blindness, Becquerel[22] found an hydatid on the surface of the left hemisphere, and that in another case, in which paraplegia was also one of the principal symptoms, Dr. J. A. Buchanan[23] found an abscess in the left middle lobe and an effusion of blood between the meninges and the brain. It is also very remarkable, especially when we pay attention to the supposition of centralisers that in some convolutions exist the so-called psycho-motor centres for the lower limbs, that there are so few cases in which disease of convolutions has been found in paraplegic patients. I can only mention two cases of paraplegia in which, perhaps, the convolutions supposed to contain those centres were diseased; but if it were proved that paraplegia in those cases was due to the intracranial alterations that were found, there would be no favourable conclusion to be drawn as regards the views of the localisers, as there was no limitation of disease to the pretended motor centres of the legs. In one of those cases, Baillarger[24] noticed that there was at first weakness of the lower limbs, but afterwards general paralysis, and no lesion was found inside of the cranium except arachnitis of the upper parts. In the other case, recorded by Bayle,[25] there was general prostration followed by paraplegia, allied with cerebral meningitis, intra-arachnoidian hæmorrhage, and granulations in the lining membranes of the various ventricles.[26]

If paraplegia is exceedingly rare in cases of disease of the middle and posterior lobes, or of the cerebral convolutions generally, it is not so in cases of disease of the cerebellum, or of the parts that have been called the isthmus of the encephalon (crura cerebri, pons Varolii, medulla oblongata); on the contrary, the number of cases in which paraplegia was allied with disease of the base of the brain, and especially of the cerebellum, is very large. If we examine first what relates to the crura cerebri, the pons Varolii, and neighbouring parts, we find, besides cases of De Beauvois, Bonnet, Girandet, Toulmouche, Beith, Roulland, H. Romberg, and T. Salter, already mentioned in the previous lecture,[27] some thirty cases, out of which I will quote the following. In a case of Abbot's,[28] there were at first attacks of paralysis of the lower limbs, especially the left one, and afterwards a gradually increasing and persistent loss of power of those limbs. The right crus cerebri was hypertrophied, soft, not quite pulpy, of a gelatiniform appearance, and so were the right corpus striatum and the hippocampus major. There were three ounces of fluid in the ventricles, the left being the most distended. In a remarkable case of polyuria, Massot[29] found that there was a much greater paralysis of the lower than of the upper limbs, caused by a cancer between the crura cerebri, extending from the pineal gland to the anterior tubercula quadrigemina. In a most valuable case of Lhuiltier's[30] a man, having hurt his head, lost consciousness, and had paralysis of the lower limbs, of the bowels, and the bladder. There were a fracture of the sphenoid, softening and suppuration of the pons Varolii, and clots of blood under the crura cerebri. The spinal cord was healthy. Montault,[31] in a case of a very long tumour under the right side of the pons Varolii and neighbouring parts, found no paralysis anywhere, but a marked weakness of the lower extremities. Constant,[32] in a case of tubercle in the pons Varolii, found paraplegia preceding paralysis of the arms. In a case in which there had been for a time left hemiplegia, which ceased, there was paraplegia, and ultimately paralysis of the four limbs.[33] Two triangular, fleshy tumours, united by their apices, were found extending from the right crus cerebri to the right side of the medulla oblongata through the substance of the pons. In a case of aneurism of the basilar artery, Lebert[34] states that there was a sudden attack of loss of consciousness with paraplegia. This paralysis gradually diminished, but, after a long time, it extended to the upper limbs. The pons Varolii and the anterior pyramids were atrophied, owing to pressure by a very large aneurism. In a case, remarkable in many respects, Professor Dubreuil[35] found as the only possible cause of a sudden paraplegia a considerable displacement of the odontoid process, which had produced a considerable atrophy of the medulla oblongata, the occipital foramen being reduced to only one-fifth of its ordinary size. Hertz[36] relates that gradually the power of motion became lost in the lower limbs, while the upper ones were attacked with weakness only a long time afterwards. The odontoid process obstructed the vertebral canal, and pressed on the medulla oblongata, which was softened at the level of the inferior part of the decussation of the anterior pyramids. Rostan[37] has recorded a case of paralytic weakness of the two lower limbs caused by a pressure on the medulla by the displaced odontoid process. A case much resembling the last three is given by Bouvier,[38] the pressure here being on the pons and the medulla, and the paraplegia being complete. In a case of aneurism of the left vertebral artery Servetre[39] found paraplegia with paralysis of the bladder.

The cases I have hastily mentioned in the preceding lecture[40] to show that a paraplegia may seem to have been caused by disease of the cerebellum, are only a few of the large number of such cases that I might relate. I will only now give the principal features of some of the most interesting cases of that kind. It is particularly in cases of tumours occupying either one side or the middle parts of the cerebellum that paraplegia has been observed from disease in that organ. Rilliet and Barthez[41] say that they have seen several cases of tubercle in both sides of the cerebellum giving rise to paraplegia. Cases of tubercle, cancer, and other tumours of the cerebellum, having—in appearance at least—caused paraplegia, have been published by Becquerel,[42] by Dr. J. H. Jackson,[43] by Mohr,[44] by Abercrombie,[45] and several other writers. In cases of hæmorrhage in the cerebellum, either in one lobe or both, a greater weakness of the lower limbs than of the upper ones, and sometimes paraplegia without paralysis of the arms, have been often noticed. This will be ascertained to be correct by the perusal of cases of cerebellar hæmorrhage in

[20] Loc. cit., p. 288.
[21] Comptes Rendus de la Société de Biologie (1859), p. 66.
[22] Gazette Médicale de Paris (1837), p. 408.
[23] The American Journal of the Medical Sciences, October 1860, p. 430.
[24] Annales Médico-Psychologiques, vol. i., 1847, p. 397.
[25] Traité des Maladies du Cerveau et de ses Membranes (Paris, 1826), p. 260.
[26] I will in the next lecture, in speaking of paralysis allied with disease of the membranes of the brain, mention a case of ossification of the dura-mater reported by Bécamier (Mémoires de la Société Médicale d'Emulation, vol. v., p. 472), and a case of cartilage in the cerebral meninges, recorded by Moncrieff (in Monro's Morbid Anatomy of the Brain, p. 51), in which paraplegia was one of the prominent symptoms.
[27] See THE LANCET, Sept. 30th, 1876, pp. 483, 484.
[28] The American Journal of the Medical Sciences, July, 1855, p. 78.
[29] Lyon Médical (1872), vol. x., No. 15, quoted by Lépine, Localisation dans les Maladies Cérébrales (Paris, 1875), p. 161.
[30] Ephémérides Médicales de Montpellier, vol. vi., p. 23, quoted by Glaize, loc. cit., vol. vi., p. 209.
[31] Journal de Physiologie de Magendie, vol. ix., p. 113.
[32] Gazette Médicale de Paris, 1834, p. 604.
[33] Abercrombie, loc. cit., p. 453.
[34] Bulletins de la Société Anatomique, 1836, p. 22.
[35] Quoted by Ollivier, d'Angers, Traité des Maladies de la Moelle Epinière, 3ème edit. (Paris, 1837), vol. i., p. 416.
[36] Quoted by Hallopeau, Des Paralysies Bulbaires (Paris, 1873), p. 119.
[37] Recherches sur le Ramollissement du Cerveau (2de edit., 1825), p. 251.
[38] Gazette Médicale de Paris, 1840, p. 480.
[39] Bulletins de la Société Anatomique, vol. xlvii., 1872, p. 415.
[40] THE LANCET, September 30th, 1876, p. 484.
[41] Traité des Maladies des Enfants (second edition, Paris, 1854), vol. iii., p. 545.
[42] Bulletins de la Société Anatomique (1841), vol. xvi., p. 397.
[43] Medical Times and Gazette, August 30th, 1862.
[44] Quoted by Ladame, loc. cit., No. 816, p. 249.
[45] Loc. cit., p. 172.

Gintrac's great work, so often quoted;[46] and especially the cases of Brunet (p. 292), of Hillairet (pp. 292 and 302), of Forget (p. 297), of Fauvelle (p. 301), of Professor Vulpian (p. 303), of Fleury (p. 303), and of Dr. Childs (p. 306). In cases of softening also paraplegia has been noticed, whether when it had extended to the whole of the cerebellum, as in a case of Murphy's[47], or only occupied one of its halves, as in cases of Andral, Binard, and Serres, which I have quoted in the previous lecture.

Facts certainly are numerous in which the cerebellum, the pons Varolii, the medulla oblongata, the corpora striata, &c., have been found diseased in patients attacked with paresis or complete paralysis of the lower extremities, but is it clearly proved that in any one of these cases of complete or incomplete paraplegia the cause of the loss of voluntary movement really was in the part of the brain or of the cerebellum that was diseased? This is the question I will now examine.

ON A CASE OF

VARICOCELÆ TREATED BY RICORD'S OPERATION:

WITH A DESCRIPTION OF A NEW MODE OF APPLYING THE SUBCUTANEOUS WIRE LOOP.

BY J. C. OGILVIE WILL, M.D.,

SURGEON TO THE ABERDEEN ROYAL INFIRMARY.

ALTHOUGH the following case of varicocele presents no features of interest as regards its causation and symptoms, yet on account of the occurrence of an accident in the course of its treatment it seems to me to be an instructive one and not unworthy of notice, and it affords me an opportunity of directing attention to a slight modification of the method originally suggested by Ricord for the cure of varix of the spermatic cord. For the notes of the case I am indebted to Mr. W. R. Tough.

W. M——, aged twenty-six, baker, suffering from varicocele, was admitted into Isaac ward on Jan. 31st, 1876. He stated that about three years ago he received a blow on the left testicle, which was followed by considerable swelling and pain, but which disappeared under treatment in about a week. A few days afterwards he got a stress when lifting a heavy mass of dough, and he felt at the time as if something had given way in his scrotum. Soon after he discovered a swelling in the spermatic cord above the left testicle; it was accompanied by some little feeling of pain and uneasiness, and, being of a nervous disposition, he got much alarmed, and forthwith consulted a medical man, who advised him to wear a suspensory bandage and to take perchloride of iron internally. He wore the bandage for two years, but without benefit, the pain still continuing, especially when he was overworked, when the swelling also underwent a marked increase in size.

On examination, the spermatic veins of the left side were found to be enlarged, being about the size of a large forefinger. The swelling was soft and doughy to the touch, was most marked at the upper part of the testicle, and descended slightly behind it. On tracing the veins upwards, they gradually decreased in bulk, and near the external abdominal ring they were of normal size; about an inch from this aperture there was another soft, compressible tumour, apparently due to a varicose condition of a vein or veins at this point. The testicle on the affected side was soft and somewhat atrophied. The right cord and testicle were healthy. There was a slight tendency to varix of the left external saphenous vein.

The patient was in a state of extreme nervousness and depression, and was anxious to be operated on, as he had allowed his mind to dwell on his disease to such a degree that his health had given way, and he felt unfitted for mingling in or enjoying any society.

On Feb. 2nd the affected veins were ligatured subcutaneously in the manner suggested by Ricord, but silver wires were employed in place of silk ligatures. The free ends of the wires were twisted round two small pieces of catheter. With the exception of retention of urine during the first three days, and slight swelling of the epididymis, which was unaccompanied by pain, there were no symptoms worthy of notice. On the sixth day after operation the patient was attacked by diarrhœa, to which he had before been subject, which resisted treatment for several days, and gave rise to considerable increase of temperature, 102·8° F. being registered on Feb. 8th. After various remedies had been tried, a pill containing sulphate of copper and opium completely arrested it.

The ends of the wire were tightened from time to time, but on Feb. 10th one of them unfortunately gave way, and after this another broke off. Fresh ends were with some difficulty applied, in the hope that the ring enclosing the veins might eat its way through them; but this it failed to do, and after waiting for nearly three weeks from the date of operation, and having consulted my colleagues, Professor Pirrie and Dr. Ogston, it was decided to cut off the remaining end, to allow the punctures to heal, and the ring to remain *in situ*. When the patient was dismissed a few days later a hard knot could be felt at and below the point where the ligature rested; above this the veins were not perceptible. I saw the patient about six months afterwards, and so improved was he in appearance that I scarcely recognised him. The pain had entirely disappeared, and with it his miserable forebodings, and he expressed himself as feeling as well as he could desire.

Two cases similar to that just narrated have been placed on record—the first by Mr. Redfern Davies,[1] the second by Mr. Barnard Holt.[2] In both the wires failed to effect division of the veins, and in both they were allowed to remain. Mr. Davies saw his patient a year afterwards, and found that all things remained as when he left. The patient had resumed work immediately upon leaving, and he was totally unaware of there being any wires in his scrotum. So well satisfied was Mr. Holt with the result in his case that "he considered it was a practice that might be repeated with advantage. Should future cases be attended with a like favourable issue, the proceeding would become general, and the pain and time of the patients be considerably abridged, while the question of recurrence would be entirely set at rest, such an occurrence being impossible so long as the wires acted as compressors." It does not seem to me, however, that this mode of cure would ever find favour either with surgeons or patients, when it can be achieved with almost equal certainty by mere temporary compression of the affected part.

The procedures suggested by Vidal de Cassis, Lee, Curling, Erichsen, Barwell, Bumstead, and Packard are all reliable, but, for my own part, I give preference to that of Ricord.

The substitution of wire for the silken threads which were formerly used is certainly a decided improvement as regards the risk of inflammatory irritation being set up; but the gain is not unalloyed, for, as is shown by the cases referred to, the wire, on account of the tolerance exhibited by living tissues to metallic bodies, may fail to effect division of the parts round which it is applied. Permanent obliteration of the venous channels is alone required, but, from the mode in which the loops are generally applied, they can only be got rid of when they have cut their way through the mass of veins they surround. Mr. Tufnell, of Dublin,[3] seeing the advantages that would accrue were the wires removable at pleasure, proposed the addition of two retractors—i.e., two loops of wire,—one of which was to be passed through each of the loops by which the veins are encircled before the latter were pulled within the scrotum. The suggestion is undoubtedly an ingenious one, but it occurred to me that the matter might be simplified by utilising the original loops, and so rendering further additions unnecessary. What I propose may, I think, be readily understood by a glance at the accompanying figures, for which I am indebted to my friend Mr. Arthur Clyne.

Instead of employing a needle with an eye near the point, a common surgical one, with a broadish point, should be selected. After threading it with a long loop of silver wire, the wire is to be knotted at a point distant about two inches from the eye of the needle, and the wire firmly

---

[46] Cours Théorique et Clinique de Pathologie Interne, &c. (1836), vol. vii.

[47] Edinburgh Medical and Surgical Journal, vol. xvii. (1831), p. 329.

[1] THE LANCET, Feb. 20th, 1861.

[2] Ibid, Aug. 30th, 1862.

[3] Dublin Quarterly Journal, May, 1861.

twisted from this knot to the eye. The vas deferens having been separated from the mass of veins, the needle is to be passed through the scrotal wall, between the vas and the veins, and brought out at the other side. The wire must be

FIG. 1: Shows point where the wire should be knotted.

FIG. 2: Needle completely armed.

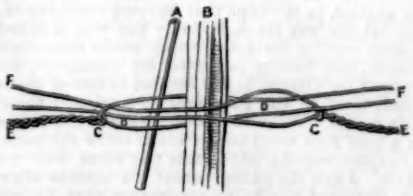


FIG. 3: Wires passed, but not tightened. A, Vas deferens; B, Vein; C C, Knots; D D, Loops; E E, Retractors; F F, Free ends.

NOTE.—In Figs. 1 and 2 the ends of the wires are represented as too short, and in Fig. 3 the retractors are also too short; this was necessary on account of the size of the columns by which the artist had to be guided.

drawn out so far as to leave the point at which it was knotted outside the scrotum. The needle may now be removed by slitting the wire at the eye. A blunt-pointed needle or probe, armed exactly as the needle was, is then to be inserted at the aperture of exit of the former one, passed over the opposite side of the veins, and brought out at the original point of entrance of the first needle, and the wire pulled out, and the probe removed, as before. The veins now lie between two double wires, the one in front, the other behind. There are two openings in the scrotum, through each of which there project two free ends, and a twisted portion of wire which has a loop directly in front of the point where the wire was knotted. The ends of each wire are then to be passed through the corresponding loop, and pulled tightly and forcibly in opposite directions until the vessels are completely strangulated. Compression should be kept up by fastening the ends around some resisting body, such as Mr. Tufnell suggested—viz., "a piece of watch-spring bent into an arc, the effort of which to restore itself keeps up continuous tension upon the cord." The twisted portions project on either side, and are thus available as retractors. When compression has been kept up for a sufficient length of time, the veins may be readily freed from pressure by snipping off the free ends, and making traction on the twisted ends. On August 4th I had the pleasure of assisting my friend Dr. F. F. M. Moir, of this city, in a case where he put this method into practice, and the result was eminently satisfactory, the removal of the wires being effected with perfect ease.

One little matter of detail is worth remembering when performing Ricord's operation—viz., that, instead of threading the second wire on a sharp-pointed needle, a probe, or other blunt instrument, should be used; for, as it has to pass through apertures already made, it does not require a cutting point, and by using a blunt instrument there is no chance of wounding any of the contents of the scrotum, and it ensures the second instrument making its exit at the exact point of entrance of the former one, so that the possibility of including any portion of the structure forming the scrotal wall is avoided.

The simplicity and certainty of the method suggested will, I trust, commend it to those who are called on to treat cases of varicocele by operation, as no appliances are required beyond those found in the pocket-case of every practitioner, and as compression judiciously applied in the manner indicated cannot possibly fail to secure obliteration of the affected veins.

Aberdeen.

ON A CASE OF SYPHILITIC DISEASE OF THE BRAIN.

BY JULIUS DRESCHFELD, M.D., M.R.C.P.,

ASSISTANT-PHYSICIAN, MANCHESTER ROYAL INFIRMARY; LECTURER ON PATHOLOGY, OWENS COLLEGE.

THE following case derives its interest from the fact that the symptoms during life and lesions after death were singularly in accordance with the results arrived at by Ferrier in his experiments on the localisation of the functions of the brain. While it thus gives substantial support to Ferrier's views, it occurs very opportunely at the present juncture, when there has been so great an outcry against vivisection, inasmuch as it shows the aid which clinical medicine derives from experimental physiology.

George E——, aged twenty-eight, engraver and letter-cutter, came first under my care as an out-patient on September 8th, 1874, seeking advice for excessive pain in his head and limbs, from which he had been suffering for more than eighteen months.

The history he gave of himself is the following:—He is married, has no living children, but his wife has had seven miscarriages. Nine years ago he had a sore and bubo, which did not break, followed by a rash and sore-throat; a year after he got married, and has often had a repetition of the rash and sore-throat, for which he took pills. Eighteen months ago he suffered severely from an attack of summer cholera. Three months after he began to suffer much from pain in his joints, especially at night; one night when in bed he had sudden spasm of right jaw, which prevented him from opening his mouth for more than a week, during which time he had to live entirely on fluid food. He suffered at the same time from pain in the head, and pain and stiffness in his right upper and lower extremity. For this complaint he was treated anti-syphilitically by his medical man in Bradford, where he then resided. He recovered gradually, and he seemed to be well again about April, 1874, when he moved to Manchester. Soon after, however, the pain in the head returned, and he has suffered from it more or less ever since.

State of the patient on admission:—Slightly built, of lymphatic temperament, a decidedly pale and anæmic look. Physical examination of chest reveals nothing abnormal. No syphilitic nodes, no rash. Fundus of both eyes normal. Tongue clean, appetite normal. Other functions normal.

Considering the syphilitic history of the patient, and the nocturnal pains, an anti-syphilitic treatment was ordered, under which the patient rapidly improved, and soon left off treatment (the last entry being Sept. 29th, 1874.)

On Nov. 12th, 1874, he returned to the infirmary, stating that he had had two epileptic fits since his last visit, one on Oct. 12th and the other on Nov. 8th. The fits, he stated, were preceded by peculiar symptoms, consisting in a sensation like electricity in his left arm, which was forcibly flexed, while the left hand was clenched and "powerless." During the fit he was unconscious, bit his tongue, and foamed at the mouth.

The case was now looked upon as a case of epilepsy depending on a chronic inflammatory process of a syphilitic nature, and the iodide of potassium was again given, but in increased doses (half a drachm). The patient continued to attend up to Christmas, when he again left off treatment, and was again visited by epileptic attacks, preceded again by the peculiar aura in his left arm and hand. For these attacks he was attended at home by a medical man, who prescribed bromide of potassium, which had no effect whatever on the convulsions, and only caused the pain in the head to be more severe; the patient at the same time lost his appetite and felt altogether very ill.

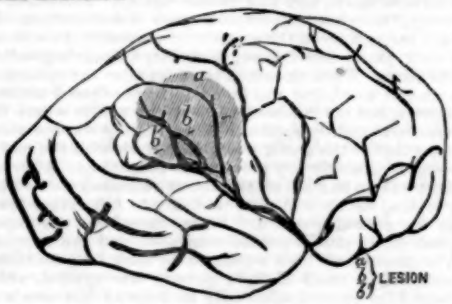
On Jan. 26th, 1875, he again came to the infirmary, and was again treated anti-syphilitically. The convulsions disappeared again under the treatment, while the aura remained. While in this condition I reported the case, together with some other cases of syphilitic nervous disease, in the *Practitioner* for May, 1875.

The further progress of the case is shortly this. The patient remained under treatment, and his condition continued unaltered for some time. One day in June, 1875,

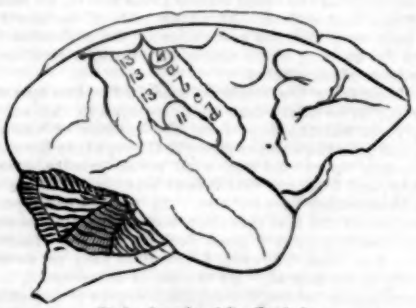
the "aura," of which the patient still complained, was witnessed by myself and several students. It consisted in a sudden clenching of the fist, flexing of the wrist, and pronation of the forearm on the left side, the left angle of the mouth being at the same time strongly drawn downwards. This sudden tonic spasm lasted for several seconds, and was then followed by a few clonic spasms of the same extremity and a slight tremor of the arm; the patient at the same time was very agitated and looked very pale, but remained perfectly conscious. He stated that these paroxysms had always had the same character, varying only in degree.

It will be seen that the contractions are exactly like those obtained by Ferrier on irritating the ascending parietal and supra-marginal convolutions of the brain in dogs and monkeys.[1]

The accompanying sketches show the situation of the lesion in the case described, and the exact locality in the monkey's brain which, on irritation, gave rise to the symptoms mentioned.



Brain of patient.



Brain of monkey (after Ferrier).

Considering the great similarity of the symptoms in this case and in the experiments of Ferrier, it was thought highly probable that the lesion in this case consisted in a chronic inflammatory process on the convex surface of brain, limited to the convolutions above-named (ascending parietal and supra-marginal) on the right side.

For a time I lost sight of the patient, but looking him up I heard that he still continued to take iodide of potassium, but that the paroxysms remained, though the epileptic attacks themselves had not reappeared. He still complained of severe headache at times.

In January, 1876, the patient again came to the infirmary, as he was now troubled with a bad cough and loss of flesh. Signs of incipient phthisis were then evident, and the patient went to Southport.

In March, 1876, he presented himself again. The physical examination of chest showed dulness of supra-clavicular mammary region on right side, with bronchial breathing and dry crackling râles. The left lung seemed normal. There was cough, but little expectoration, no hæmoptysis, no night sweats, but marked emaciation. For a short time I was in doubt whether I had now to do with a case of ordinary or syphilitic phthisis. The tonic treatment, which had been commenced some time ago, was, however, continued. All doubts about the nature of the lung affection were soon dispelled, for the left lung soon after showed signs of infiltration; hæmoptysis and night-sweats came on, and the patient lost ground very rapidly, and died on Sept. 30th, 1876. During the whole of that time the peculiar contractions on the left side occurred occasionally, and had quite the same character as at first.

Dr. J. Ross, pathologist to the infirmary, kindly made the post-mortem examination for me. The head only was allowed to be opened, and the following lesions were found:—The dura mater was adherent to the pia mater, arachnoid, and superficial part of the brain over a very limited area on the right side; the dura mater was slightly thickened; and there were many Pacchionian bodies. On removing the dura mater, it was found that the adhesion to the cortical portion of the brain on the right side, stated above, was so firm that part of the brain-substance had to be taken away with the dura mater. On closer examination, it was found that the adherent portion corresponded exactly to a portion of the ascending parietal and supra-marginal convolutions of the right hemisphere. The cortical portion of the brain in that region was found softened, the softening, however, not extending to any depth. The pia mater was found slightly thickened and opaque in some few places.

The following measurements, as regards extent and situation of lesion, were taken on the spot:—Length of right hemisphere, 8 in.; from anterior extremity of the brain to anterior edge of lesion, 4 in.; length of lesion, 1¼ in.; breadth of lesion, 1¼ in.; from lower edge of Sylvian fissure to inferior margin of lesion, 2¼ in.; from upper margin of hemisphere to upper border of lesion, 1 in.

The microscopic examination of the softened portion showed many of the ganglia-cells granular and atrophied, besides granular detritus, fat-drops and granule-cells.

The other portions of the brain, its membranes, and vessels were found perfectly healthy.

As a confirmation of Ferrier's views, the above case seems to be of the greatest importance, owing to the fact that the lesion was so limited and superficial, and the rest of the brain normal, while the symptoms during life were so distinct.

Manchester.

[1] Proceedings of Royal Society, vol. xxiii., p. 410.

ON THE USE OF ESMARCH'S ELASTIC CONSTRICTOR IN AMPUTATION OF THE HYPERTROPHIED CERVIX UTERI.

BY A. L. GALABIN, M.A., M.D.,
ASSISTANT OBSTETRIC PHYSICIAN TO GUY'S HOSPITAL.

(*Concluded from* p. 231.)

IN the two cases which I am about briefly to relate, I have adopted a plan which has been successfully carried out by Dr. A. Martin of Berlin, and also by Prof. Esmarch himself—namely, to place an elastic constrictor round the cervix while the flaps are being cut and sewed down upon the stump. Dr. Martin raises the just objection to the use both of Cintrat's serre-noeud and Emmet's tourniquet, that if the instrument is applied below the vaginal reflection the available space is much limited, and the whole of the vaginal portion of the cervix cannot be removed; while if it is placed above it, there is danger of drawing it too tight and injuring the bladder or peritoneum.

CASE 1.—Sarah C——, aged twenty, a general servant, unmarried, was admitted into Guy's Hospital under my care on June 9th, 1876. She had suffered from prolapse of the womb, gradually increasing in degree, for about four years. Of late the womb always protruded outside the vulva whenever she stood or walked, and she suffered constant bearing-down pain. Menstruation was profuse and very painful, recurring every second or third week and lasting seven or eight days. The cervix was found to be external to the vulva. It could be reduced within it upon pressure, but could not be restored to its natural position, the vaginal portion being much elongated, and occupying a considerable portion of the vagina, even when the fundus was raised to its proper height. The cervix was in no de-

gree indurated, but soft and swollen, and strongly pulsating arteries could be felt in it. There was no ulceration of the exposed portion. The outlet of the vagina appeared to be virginal, but was a good deal relaxed. The sound passed four inches, the greater part of the increase of length being apparently due to elongation of the cervix. An attempt was made to make use of Hodge's pessary, but it was found to be of no benefit, for the vagina would not admit a large instrument, and a small one failed to keep up the uterus. Dr. Oscar Prevôt of Moscow, while visiting the hospital, saw this patient with me. He had seen Dr. Martin operate at Berlin by means of the elastic constrictor, and it appeared to him that the case would admit of this treatment. I therefore resolved to make trial of it, especially since, on account of the soft and obviously extremely vascular condition of the cervix, it would afford a crucial test of the efficacy of the plan in arresting hæmorrhage permanently.

The operation was performed on June 30th, a week after the cessation of a menstrual period. The cervix was first drawn down by tenaculum forceps, and the position of the lowest point of the bladder ascertained by means of a catheter. The cervix was then transfixed by a large hare-lip pin, passed from before backwards, about a quarter of an inch below this point. A second similar pin was passed transversely just above the first. The pins then kept the cervix external without any further need for the tenaculum. Two turns of thin tubing of red rubber were then passed round the cervix above the pins, so as to compress it moderately, and tied in a knot. I cut the flaps in the manner recommended by Prof. Hegar and Dr. Martin, partly from the external mucous membrane of the cervix, and partly from that of the cervical canal. The cervix was divided by the knife. The flaps were then stitched down upon the stump by a continuous suture of carbolised gut, carried round the whole circumference of the cervix, the stitches being brought to the surface for a short space midway between the two margins. The stump was thus completely covered, the cervical canal being left rather widely patulous. After the first few drops of blood had escaped, the tissues remained quite bloodless during the operation; but as soon as the constrictor was removed, rather smart arterial bleeding commenced, the blood welling up between the edges of the flaps. The constrictor was therefore again tied, and deep interrupted sutures of carbolised gut were passed straight through from the exterior of the cervix to the cervical canal. These were tied rather tightly, being arranged in a somewhat diagonal direction as they were tightened. This time, when the constrictor was loosened, only slight oozing took place, chiefly from the tracks of the last sutures, and this ceased in about a minute.

The patient went on well until the fourth day, when some secondary hæmorrhage came on during the night. This was checked by the application of ice to the vagina. Slight bleeding, however, took place from time to time, and on July 7th (the eighth day) it came on rather severely, and it was thought desirable to arrest it by plugging the vagina. This hæmorrhage appeared to be mainly due to the occurrence of a menstrual period, for, the speculum being used, the blood was seen to be issuing from the cervical canal. After this it did not recur to any excessive degree, and ceased after the following day. On examination, the flaps were found to have united over the anterior part of the cervix, but to have sloughed away in part posteriorly, doubtless on account of the tightness with which it was found necessary to tie the sutures. On July 27th the patient left the hospital. At the time of her departure the sound passed two inches and three-quarters, the length of the uterus having been diminished by a somewhat greater amount than that actually cut away. There was some tendency to retroversion, and on this account, and to avoid the risk of recurrence of the prolapse, a small Hodge's pessary was introduced, and was found readily to keep in place.

CASE 2.—Ellen H——, aged twenty-nine, single, was admitted into Guy's Hospital under my care on August 9th, 1876. She had suffered from prolapse of the womb ever since the age of nineteen, when it became protruded suddenly after severe exertion. Since that time it had been almost constantly external to the vulva. She had been in the hospital on several previous occasions, and pessaries of various sorts had been tried, but she had obtained only temporary relief. Menstruation was regular, not very profuse, but excessively painful. At her admission the cervix protruded for a considerable distance from the vagina. It was much swollen, but not ulcerated. The elongation appeared to be chiefly in the vaginal, but partly also in the supra-vaginal portion of the cervix. The sound passed four inches and a half. The vaginal outlet and hymen appeared to be intact, but much relaxed. The cervix was soft, swollen, and not indurated, but no strongly pulsating arteries could be felt in it, as in the former case.

The operation was performed on August 21st, seven days after the cessation of a menstrual period. The uterus was drawn down and transfixed with pins, and the constrictor of elastic tubing applied in the mode already described. On this occasion I cut the flaps, according to the method of Marion Sims, entirely from the external mucous membrane of the cervix, and divided the cervix itself by scissors, instead of by the knife. I stitched the flaps down upon the stump with interrupted sutures of thick carbolised gut, passed directly through from the outside of the cervix into the cervical canal, and tied rather tightly. Performed in this way, the operation occupied much less time than the former one, and when the constrictor was removed no bleeding took place, nor did any secondary hæmorrhage afterwards occur. When examined ten days after the operation, the mucous membrane was found to have adhered all over the cervix, but notches were seen at the points where the sutures were tightly applied. When healing was complete, the remnant of the cervix was almost flush with the roof of the vagina, scarcely any prominence remaining. After the patient was up and about, the uterus remained well within the vagina, but showed some tendency to fall rather lower than its normal position. Since, therefore, the supra-vaginal cervix still remained elongated, and the supports of the uterus had been weakened by such long-continued procidentia, a small Hodge's pessary was applied, which answered its purpose effectually in keeping the cervix at the summit of the vagina. At the time that the patient left the hospital the sound passed three inches, an inch and a half less than at first. About an inch of the cervix only had been removed, the remainder of the difference being due to the keeping of the uterus at its proper level and the diminution of congestion.

On comparing the methods used in the two operations, there can be no doubt that that employed in the second—namely, to cut the flaps from the exterior of the cervix only, and pass the sutures straight through into the cervical canal—can be carried out with much greater ease and rapidity, and I believe that it is at least as efficacious as the other in arresting hæmorrhage. In the latter respect the experience of the first operation was scarcely encouraging, for the bleeding gave a good deal of trouble. Instructed by the first case, however, I found it easy to avoid the difficulty in the second. By the use of interrupted, instead of a continuous suture, the requisite degree of pressure was much more readily adjusted, and the division of the cervix with rather blunt scissors, instead of by the knife, had probably also some influence upon the amount of subsequent bleeding.

In both instances I made use of carbolised gut sutures, while Sims and Emmet have employed silver wire, and Hegar and Martin have chosen silk. The gut sutures have the great convenience that no interference or introduction of speculum is necessary for their removal, but they may be left to come away by themselves. It is likely, however, that, in the first case, the secondary hæmorrhage which occurred on the fourth day, although determined by the onset of a menstrual period, depended in part upon the softening or dissolving of the sutures. In such cases as this, where there is evidence that the cervix is unusually soft and vascular, it would probably be preferable to employ silver wire. This would have the further advantage that the sutures can be readily tightened a little more if, when the constrictor is removed, the hæmorrhage is not found to be completely arrested.

Both of the cases which I have related belong to that class which is a comparatively uncommon one—namely, that in which hypertrophy of the vaginal portion of the cervix is found in nulliparous women, in whom it is probably in great part a congenital condition, although the consecutive prolapse may tend to increase the hypertrophy. There is, however, another kind of hypertrophy of the cervix which still more frequently calls for operative interference, and in

which I think that the method of amputating with the aid of the elastic constrictor affords a still greater advantage. I refer to the cases of women who have had children, in whom there is procidentia of the uterus, associated with hypertrophy both of the vaginal and the supra-vaginal portion of the cervix. The starting-point of the mischief is then usually injury received by the cervix in parturition, and consequent hyperæmia and chronic hyperplasia. The procidentia, however, adds greatly to the effect by producing strangulation of the cervix and venous congestion. In these cases it is generally desirable to remove as much as possible of the vaginal cervix, although not to incur the risks of hæmorrhage and of injury to the bladder or peritoneum involved in the operation proposed by Huguier for the excision of the supra-vaginal cervix. Usually, however, there is much difficulty in ascertaining exactly the extreme point at which the wire of the écraseur may with safety be applied. In the procident uterus the mucous membrane of the cervix is so loosened from the muscular tissue beneath that the point of vaginal reflection becomes indefinite, and it may appear at first sight that there is no lengthening of the vaginal, but only of the supra-vaginal portion, when an exploration by the sound of the position of the bladder shows that the vaginal portion is really considerably elongated.

If the elastic constrictor be used for the amputation in such a state of things, it would seem desirable, to avoid any risk to the bladder or peritoneum, not to transfix the cervix by two pins at right angles, but to pass two parallel pins transversely. If one transverse pin only be used, the constrictor may tend to slip off at the front or back. There is then no risk of injury, even if the pins be passed somewhat above the vaginal reflection, since experience shows that the bladder and pouch of Douglas suffer no harm from the moderate compression which they may undergo from the constrictor. The operator has then ample time at his disposal, and the opportunity of seeing exactly the relation of parts as he proceeds. And since anterior and posterior flaps are cut from the cervix itself, there is no likelihood of opening the bladder or peritoneal cavity by the knife.

It need scarcely be said that the method which I have described is applicable only to cases in which the cervix can be drawn down externally without the use of undue force. This comprises, however, by far the greatest number of cases in which operation is desirable, since it is generally as producing real or apparent prolapse that hypertrophy of the cervix calls for interference. Some cases, however, occur, especially in women who marry, having congenital hypertrophy of the vaginal cervix, in which the enlarged cervix causes irritation or inflammation while it remains at its proper level. In them the galvanic cautery écraseur appears to be by far the best means of removal.

In conclusion, the points in which it appears to me that amputation with the aid of the elastic constrictor compares favourably with the use of the galvanic cautery may be summed up as the following:—1. It requires no implements except those which any practitioner has always at hand. 2. Although the operation itself takes somewhat longer, the patient, if the flaps unite, is saved from the necessity of protracted suppuration and cicatrisation. 3. There is no danger of contraction or obliteration of the cervix being produced. 4. The operator is able to ascertain more precisely the exact extent to which amputation may with safety be carried.

ANEURISM OF THE EXTERNAL CAROTID ARTERY.

BY E. COLSON, M.R.C.S.,
SURGEON, BOMBAY ARMY.

ROWJEE BIN ESSOO, aged about forty-eight years, a cultivator by caste, was admitted into the Civil Hospital, Sattara, with an aneurism of the external carotid artery.

The previous history of the case, as given by the patient, is as follows. At the beginning of August last, he noticed a small hard swelling situated about the angle of the inferior maxillary bones. This at first gave him no inconvenience, but as it increased in size it caused him considerable pain.

On admission, a large tumour of about the size of an orange was found occupying the upper part of the neck on the left side; there was well-marked pulsation and a loud bruit. The patient complained of constant pain, which he described as shooting into the ear, and of being unable to sleep on that side. From the time of his admission to Nov. 14th the tumour increased rapidly, by that date occupying two-thirds of the neck, and also showed signs of pointing, its walls having evidently thinned in one direction. A few days after admission the man complained of the pain becoming more acute, giving him no rest by day or night, though anodynes were freely administered.

On Nov. 14th he complained of being unable to swallow anything except fluids.

As the tumour was now evidently pressing on the œsophagus and the prognosis was most unfavourable, on the 15th of November, after consultation with Surgeon-Major Ross, H.M. 4th N.I., and Surgeon Brodie, who agreed with me on the absolute necessity of the operation, I ligatured the common carotid one inch above the clavicle, that space alone being available owing to the encroachment of the tumour. The ligature used was the ordinary silk one, no carbolised gut being in store. Immediately after the application of the ligature the tumour became cold and all pulsation ceased. Temperature after the operation, 95°.—4 P.M.: Temperature 99°; difficulty of swallowing increased, a great deal of saliva flowing from the mouth. Hypodermic injection of morphia (one-twelfth of a grain) at night, and to be continued every night.

Nov. 16th.—Slept tolerably; saliva flowing in less quantities; difficulty of swallowing as before. Temperature 100°.

17th.—Swallows with somewhat more ease, being able to take a little gruel. Temperature 99°.

18th.—All pain disappeared, but complains that his head feels cold. Morphia injection to be discontinued.

19th.—Complains of pain in the head, which prevented him sleeping at night. Injection of morphia to be continued at bedtime.

20th.—Pain in the head has disappeared; swallows fluids without difficulty.

From this date to that of his discharge the case progressed most favourably. By the 25th he could swallow solid food. On Dec. 3rd the ligature came away. The tumour has had no return of pulsation, is smaller and hard, all fluctuation having disappeared. The man himself has perfectly regained his health and spirits, and states that the tumour causes him no inconvenience whatever.

Dec. 22nd.—Discharged.

Sattara.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

FRACTURE OF CERVICAL SPINE; STRICTURED URETHRA; PUNCTURE OF BLADDER; POST-MORTEM APPEARANCES.

(Under the care of Mr. CHRISTOPHER HEATH.)

FOR the following notes we are indebted to Mr. Gould, surgical registrar.

G. P——, aged thirty-six, a very intemperate man, fell down twelve steps while drunk on Sept. 2nd, 1876. He was at once rendered unable to move his arms or to walk, and was carried to bed. After about half an hour he "fainted," and remained unconscious for about fifteen minutes. He then continued restless and sleepless until the date of his admission, Sept. 3rd.

On admission he was quite conscious. He was found to have complete motor paralysis of the left leg and of the extensor muscles of both arms and forearms, his respiration

was entirely diaphragmatic; he complained of a little numbness in the hands and left leg, but there was no distinct paralysis of sensation; he had a sense of constriction round the upper part of abdomen; priapism only partial; pupils were equal and acted to light; no facial paralysis; some tenderness all down spine, but most marked over the sixth cervical vertebra; no displacement was detected. Dr. Gowers saw the patient, and noted, in addition to the loss of power of the extensors of the arm, that the power in the deltoid and flexors of the elbow was good on each side; that there was the slightest possible movement of the flexors of right fingers, none of the left; decided loss of faradaic irritability in the left ulnar nerve, and in all the muscles supplied by it, not in the right; little change in the other muscles; the reflex action much diminished in the left leg. There was involuntary passage of fæces and retention of urine. On passing a catheter, two strictures were found, the posterior of the two only admitting a No. 1. Thirty ounces of urine were drawn off; the urine was acid, and free from albumen and sugar. Ordered five grains of calomel as a purge.

He remained in the above condition until the night of the 5th, when he became noisy, restless, and delirious. A chloral and morphia draught was administered. The urine dribbled away, but on the 7th a catheter was passed to relieve retention. He also had another dose of calomel (five grains). He had now gained a little power in his arms, and could bend and extend his elbows more freely. Priapism only slightly marked. On Sept. 9th he complained of pain starting from his toes, and then spreading all over his body, but especially running up to the back of his neck; the pain intermitted every few minutes, and continued to do so until his death.

Sept. 11th.—Temperature 102·2°. Unconscious; pupils regular, size of pin's head. Mr. Heath, being unable to introduce a catheter, punctured the bladder through the rectum in the ordinary way, and tied in the cannula. The urine was bloody, ammoniacal, and very offensive. Instructions were given to have the bladder syringed out with warm water twice a day.

13th.—Patient is in a drowsy state, at once aroused by a touch or by being addressed.

16th.—Quite conscious. Lies with arms at right angles to trunk. Numbness on back of left hand and over left leg; elsewhere the sensation is perfect. Dr. Gowers examined the patient, and found that the electric irritability of the abductor indicis and of the interossei of left hand and of left ulnar nerve had quite disappeared. The biceps and deltoid much weaker, but presented no loss of irritability. Pupils contracted, the left being a little the smaller; slight ptosis of left eyelid. Breathing quiet; no cyanosis; chest resonant; no râles. Tongue dry.

On the 23rd it was noted that the movement in the arms had decidedly improved; pupils slightly contracted. The cannula was removed from the bladder and replaced by a gum-elastic catheter. The next day he said he felt weaker; he refused his food, and in the afternoon vomited.

25th.—Much weaker, tongue dry and brown; takes nothing but brandy. No cyanosis; no râles; chest resonant to base; extremities cold; urine very bloody. Profuse perspiration, limited to right side of face, was noticed. He died just before noon.

The temperature was taken daily, and was constantly raised, but only slightly, ranging from 99·2° to 102·2° on one occasion, being generally under 101°. The pulse was never over 72.

Autopsy.—Spine: The body of the sixth cervical vertebra was crushed in front, and the right anterior transverse process broken from the body, and the tip of the right articular process fractured. The posterior common ligament was partially lacerated. These injuries allowed the fifth cervical vertebra to fall forwards on the sixth. The spinal cord was examined by Dr. Gowers, whose report is as follows:—"Dura mater of the cord firmly adherent to the disturbed cervical vertebra, and a little thickened at the spot; no other sign of inflammation; a few extravasations of blood outside dura mater in vicinity of adhesion; inner surface of dura mater and pia mater normal. The spinal cord, on its external aspect, was natural, there being no sign of laceration or contusion opposite fracture; the consistence was, however, slightly lessened. Section here showed extensive disorganisation; grey and white substance broken up, and mingled with small extravasations of blood. The microscope showed abundant 'granule corpuscles.' This change was equal in the two sides of the cord, and extended from the seventh to the eighth pairs of nerves. A little higher, opposite the sixth pair, the cord was scarcely damaged, slight irregularity in the outlines of the anterior grey cornua being the only abnormality. Lower down, between the eighth cervical and first dorsal pairs, the left anterior cornu alone was damaged, the right side being normal in appearance. Below the first dorsal pair the cord appeared healthy. All the anterior roots of the nerves appeared healthy to the naked eye, but on microscopical examination those of the seventh pair were much degenerated on each side; those of the eighth pair were degenerated on the left side, almost healthy on the right. In the first dorsal pair the degeneration was slighter, and was also chiefly on the left side. This left-sided affection of the anterior cornu in the lowest cervical region, and left-sided degeneration of the anterior roots, corresponds with the loss of electrical reaction in the left ulnar nerve observed during life." There were two strictures in the urethra. The bladder was greatly hypertrophied and congested; the puncture was seen to be exactly in the centre of the trigone. Ureters dilated; kidneys large, deeply congested, and swollen, with numerous whitish streaks of commencing suppuration scattered through the cortex. Recto-vesical pouch of peritoneum normal, not wounded by the trocar. Heart, liver, and spleen healthy; lungs emphysematous. There was slight superficial collapse of the posterior part of the lower lobes; no signs of recent bronchitis.

In some clinical remarks on this case, Mr. Heath referred to the rarity of recovery in cases of injury to the cervical spine, death occurring either from bedsores, ulceration of the bladder, or, most frequently, from congestion of the lungs due to imperfect aeration. The above case was an example of diaphragmatic respiration, the chest-walls being paralysed; but the opposite condition had been witnessed by the students in a recent case of pistol-shot lodged in the spine, where the diaphragm was paralysed, or at least did not work, whilst the other inspiratory muscles were intact. As the strictured condition of the urethra rendered it impossible to relieve the bladder by catheter, Mr. Heath had no hesitation in tapping the distended bladder per rectum, thereby making a dependent opening, by which the urine flowed away as fast as it was secreted without decomposing. Mr. Heath said that he regarded the result as so satisfactory that he would be inclined to adopt the practice in any other case of spinal injury of a hopeless character, rather than have recourse to constant catheterism with all its difficulties and dangers.

CHARING-CROSS HOSPITAL.

ELEVEN CASES OF ACUTE RHEUMATISM TREATED BY SALICYLATE OF SODA.

(Under the care of Dr. POLLOCK.)

For the following abstracts we are indebted to Dr. Walter B. Houghton.

CASE 1.—A. W——, male, aged nineteen; sixth attack. On admission found to have old mitral and aortic disease, and hypertrophy and dilatation; pain in knees and shoulders; temperature 102·8°F. Ordered fifteen grains of salicylate of soda every four hours; temperature fell to normal. Patient died in consequence of the old heart disease.

CASE 2.—W. H——, male, aged seventeen; first attack. Pain in knees and ankles on admission, and mitral systolic murmur; temperature 102·2°. Ordered fifteen grains of salicylate every four hours. On third morning after admission temperature was normal, and remained so during the remainder of his stay in hospital; pain disappeared at the same time. There were no cerebral symptoms induced by the drug, and patient was discharged well.

CASE 3.—E. R——, female, aged twenty-two; third attack. Old mitral systolic murmur. Joints of lower limbs painful on admission; temperature 100·7°. Ordered fifteen grains of salicylate every four hours. In two days temperature fell to normal, and pain disappeared. Discharged convalescent.

CASE 4.—W. K——, male, aged twenty-four; seventh attack. Old mitral murmur; pericarditis, with great dyspnœa. On admission temperature 101·2°. Ordered sali-

cylate in fifteen-grain doses every four hours. Temperature fell to normal, and friction disappeared. Discharged convalescent. No cerebral symptoms.

CASE 5.—A. T——, male, aged twenty-four; second attack. Pain in knees and ankles on admission; temperature 101°. Ordered fifteen grains of salicylate every three hours. For two days after admission temperature varied between 100° and 103°; it then gradually fell to normal. Discharged well.

CASE 6.—R. M——, male, aged twenty-eight. Subject to rheumatism. Delirious on admission, with temperature of 102°. Ordered fifteen grains every hour. The day after admission temperature was 104°; and two days later it reached 106·8°. The temperature continuing to rise, the salicylate was reduced to ten grains every three hours, and the cold pack employed. In spite of this the temperature remained elevated, and reached 109° before death.

CASE 7.—T. M——, male, aged nineteen; first attack. Pain in knee and ankles on admission, with feeling of oppression in the chest; heart normal; temperature 103°. Ordered fifteen grains of salicylate every two hours. This seemed to have no lasting influence on the temperature. Pleurisy, pericarditis and endocarditis were developed, and patient died fifteen days after admission.

CASE 8.—E. H——, female, aged twenty-seven; first attack. Pain in joints on admission; temperature 102°. Ordered fifteen grains of salicylate every three hours. In four days temperature fell to normal, with great relief to the pain. Patient was very noisy at night, and during the day her manner was much excited. A week after admission the salicylate was reduced to five grains three times a day. Temperature began to rise almost immediately, with some return of the pain, and the former dose was resumed. This brought the temperature down to normal in a few hours. Patient is now convalescent.

CASE 9.—M. M——, female, aged twenty-six; first attack. Temperature on admission 101·8°. Ordered fifteen grains of salicylate every three hours. Temperature reached normal in forty-eight hours. Patient complained of some headache, with singing in the ears and partial deafness. These symptoms disappeared on discontinuing the drug, and patient is now convalescent.

CASE 10.—A. M——, female, aged nineteen; third attack. Old mitral systolic murmur. Temperature on evening of admission 102·6°. Ordered fifteen grains of salicylate every three hours. This brought the temperature down to normal, but led to headache, tinnitus aurium, and partial deafness, with nocturnal delirium. The drug was discontinued, when the cerebral symptoms almost disappeared, but the temperature began to rise. The articular pain returning, salicylate of soda was ordered in five-grain doses three times daily. Temperature continued rising, and the pain increased. The salicylate was increased to ten grains three times a day, but without any effect on the temperature. The drug was next increased to twenty grains every three hours, and the temperature fell from 102° to 100·2° in twelve hours. Patient is still under treatment.

CASE 11.—W. B——, male, aged twenty-three; second attack. Pain in knees and ankles on admission, with temperature of 101·8°. Ordered fifteen grains of salicylate of soda three times a day. Temperature reached the normal and pain disappeared on third day after admission. There have been no cerebral symptoms, and patient is convalescent.

Remarks by Dr. POLLOCK.—Taken generally, the foregoing cases serve to illustrate the control that salicylate of soda possesses over the rheumatic poison. In two or three cases the drug produced some peculiar cerebral symptoms—delirium, restlessness, &c.,—but these quickly passed off upon the salicylate being discontinued, without leaving the slightest ill effect behind. They returned but very slightly, and rapidly passed off upon the resumption of the drug. Under these circumstances, and bearing in mind that only a few patients exhibited the delirium &c., it is difficult to ascribe such results to any impurity in the salicylate of soda, though more evidence is wanted on this point. Relapses occurred only in those cases where the medicine had to be left off on account of the cerebral symptoms, and in them the resumption of the drug was rapidly followed by convalescence. In most cases a week sufficed to effect a cure, apparently permanent. In the fatal case with high temperature, the salicylate seemed to have no good effect whatever, though the post-mortem revealed no pericarditis or other acute inflammation. In the other fatal cases it exercised a partial effect only. It may be added that, with the exception of the cerebral symptoms above mentioned, and a little deafness and singing in the ears, no alarming or disagreeable symptoms were produced by the salicylate.

NORTH DISPENSARY, LIVERPOOL.

CASE OF INTUSSUSCEPTION SUCCESSFULLY TREATED BY INFLATION.

(Under the care of Mr. T. D. RANSFORD.)

ON Dec. 14th a male child aged six months was taken by its mother to the dispensary. Just before 6 o'clock on the previous evening the mother was dandling the child (which seemed at the time quite well and in good spirits, and had not presented any signs of diarrhœa or intestinal disturbance) on her knee. Quite suddenly the baby became pale and seemed in great pain, and broke out into a cold, clammy sweat. At half-past 6 it passed a blood-stained motion. All night the child was very restless, and got no sleep until 2 o'clock in the morning; it then slept one hour, and then passed blood again, while vomiting had been almost constant from the beginning.

When seen at the dispensary, the child seemed to suffer much from paroxysms of pain, during which he cried out and was very restless; the abdomen was flaccid and not painful on pressure, and an indistinct rounded mass was felt in the left hypochondriac region. He was taken to the Northern Hospital to be treated as an in-patient, but the mother would not consent. Here he was again examined, and as no abdominal tumour could now be felt, and as a rectal examination elicited very different opinions, the diagnosis of intussusception was considered doubtful. Nevertheless, an injection of olive oil was tried; this was followed by no other effect than the passage of some clotted blood. The child was then sent home, where it was seen shortly afterwards, and a drop and a quarter of tincture of opium given every six hours.

The child passed a tolerable night up to two o'clock, and passed no more blood; but next day the vomiting and pain continued unabated, and the obstruction seemed to be quite complete. Temperature in rectum 100·4°; pulse 136. At 3.30 P.M. the rectum was examined and found empty, but when the child strained something was felt to impinge upon the finger. The finger was stained with blood and mucus, but there was no trace of fæces. Although the child had not vomited since the morning, vomiting occurred during the rectal examination. With the assistance of Dr. Cormack, inflation by bellows was practised for about twenty minutes, some air escaping per anum at each action of the bellows. The child passed about a tablespoonful of blood and mucus when the nozzle of the bellows was withdrawn.

Dec. 16th.—The mother states that since the inflation the child has been easier, the vomiting has not returned, and at five o'clock this morning he passed a liquid motion free from blood. Flatus has been passed in abundance, and he has had a good night. Child seems nearly free from pain. On digital examination, the rectum offered nothing abnormal, but was found full of fæces, which passed in abundance on withdrawing the finger. Takes the breast well. Temperature in rectum 100·2°; pulse 128. For a day or two the opium was continued, with the object of keeping the bowels quiet and of relieving pain, for which hot fomentations were also applied. By the end of the second day everything was left off, and when the child was seen for the last time, on the 22nd of December, the mother said he was as well as ever, with the exception of being a little pale.

Remarks.—In this case the diagnosis of intussusception was doubted by some, because no abdominal tumour was felt; but West says "it happens in at least a large number of instances that the most careful examination fails to detect anything unnatural." It was also said that the absence of abdominal tenderness contraindicated intussusception; but Bristowe says there is "not necessarily any abdominal tenderness—indeed the patient often finds relief, as in colic, from pressure on the abdominal parietes." But the sudden attack in a previously healthy child seems diagnostic. Nothing else than intussusception could bring on total and

sudden obstruction of the bowels, with early passage of blood and paroxysmal pain, in a baby six months old.

As to the treatment, everyone will agree that an attempt to reduce the intussusception, either by inflation, or injection, or position, is to be made before other chances are taken into consideration; but, if these fail, is it justifiable to urge abdominal section? In this case the mother was told that if the bowel could not be got back, an operation might be necessary, but that it could not be said that the child was certain to die if it were not done; for although Hutchinson has stated that in cases of intussusception of the large intestine he had never seen a recovery take place, yet Bristowe states that "the results of the separation of the slough seem favourable in about half the total number of cases;" and as to the published statistics of the operation, they are very little to be trusted, for all the successful cases are certain to be published, while many of the unsuccessful cases are not. In a review of the subject, in THE LANCET, some months since, eighteen cases are said to have been recorded, with eight recoveries. One thing seems certain, that unless an operation is done early in the acute cases, it is better to trust to cure by the bowel sloughing, for in one case of abdominal section which Mr. Ransford saw in a child, the intussusception could not be reduced, and the operation did no good. In the chronic cases death seems to take place from exhaustion, often before any inflammation or sloughing has taken place; and in this class no doubt abdominal section gives a very fair chance of recovery a long time after the symptoms have set in, as the cases of Messrs. Hutchinson, Marsh, and Howse prove.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

THE ordinary meeting of this Society was held on the 20th inst.; Dr. Murchison, the President, in the chair. This was the third evening devoted to the exhibition of specimens of visceral syphilis; and after the series sent from Netley by Dr. Aitken had been shown, and a collection of drawings sent by Dr. Sutton, illustrative of various forms of lesion, the subject of syphilis of the lung was dealt with, Drs. Green, Pye-Smith, and Shepherd showing specimens, and Drs. Wilson Fox and Payne making comments on them.

In the course of the evening, Mr. Haydon White, Dr. Makins, and Mr. J. T. Whitmore were elected members of the Society.

The meeting was prolonged beyond the usual hour, and, before adjourning, the President announced that at the next meeting a paper would be read upon Fibroid Changes in the Spinal Cord and Bloodvessels with Chronic Bright's Disease, by Sir William Gull and Dr. Sutton; and another on the Organisms characteristic of Vaccinia and Variola, by Mr. Godlee.

The PRESIDENT exhibited for Dr. AITKEN a series of specimens from the museum of the Royal Victoria Hospital, Netley. Each specimen was accompanied by a short description:—(1) Syphilitic Disease of the Brain. Two specimens. One of a gumma, the size of a walnut, seated below the extra-ventricular part of the corpus striatum. The subject, a soldier, had been for years under treatment for syphilis. Death occurred in an epileptiform seizure. The other was from a soldier twenty-seven years of age, who contracted syphilis seven years before death, which also occurred after convulsion and paralysis. The calvaria was diseased and adherent to the dura mater; and the anterior lobe of one cerebral hemisphere was softened and the seat of two gummata; the central ganglia being also softened. There were gummata in the liver. (2) Syphilitic Disease of the Heart. This was a section of the hypertrophied walls of the left ventricle, studded with yellow, firm, opaque, circumscribed nodules, and tough fibrous bands. There were gummata in the testis and brain. The patient had secondary syphilis more than ten years before death, which took place suddenly. (3) Two specimens of Disease of the Aorta, from syphilitic subjects. Each showed thickened nodular patches and puckered cicatrices in the lining membrane of the aorta. In the one case the associated lesions were ulceration of the pharynx, indurated liver, and lardaceous spleen; in the other, gummata in the brain, liver, and spleen. (4) Three specimens of Gummata in the Lung. (5) Two specimens of Gummata in the Liver, one of which Dr. Murchison remarked as being of very old date, having been in the museum at Fort Pitt. (6) Disease of the Calvaria. (7) Specimens of Syphilitic Disease of the Testis.

Dr. TURNER exhibited for Dr. SUTTON several drawings illustrative of different forms of visceral syphilis. 1. Syphiloma of the Brain, in which the new growth springing from the inner surface of the parietal bone, and involving the membranes, invaded the cortical substance in this situation; whilst several of the nerves at the base were also surrounded by new material. The case was that of a young woman, twenty-six years of age, who, six months after her marriage ten years before, suffered from sore throat and enlarged cervical glands; but she had no rash. Six months before her admission she began to have pain and weakness in the right leg; and she suffered from headache and vomiting about one month before admission. She was then also losing sight in the left eye; and the optic discs, at first natural, were observed to become blurred, especially the left; and with this occurred some paralysis of the left third and right sixth nerves. After death—which occurred from coma following convulsions—a node was found on the left parietal bone, and the dura mater was adherent to the brain in the left hemisphere; the outline of the convolutions being lost. A change occurred in the convolutions of the middle lobe of the right hemisphere. The left optic nerve was surrounded by greyish material, as were also the left third and right sixth nerves. The surface of the liver was puckered, and its capsule thickened. 2. Drawings of Aorta, Lungs, and Testis, from a case of Congenital Syphilis. This case was referred to by Mr. Hutchinson at the last meeting. The patient was a lad, fourteen years of age, who was admitted with symptoms of compression of the left bronchus; his teeth were notched and his forehead prominent. One of the drawings showed enlarged glands in the posterior mediastinum, and broncho-pneumonia. The coat of the aorta presented several circumscribed nodulations just above the valves, without any atheroma elsewhere. The nodules in question had originated in the deeper layers of the arterial coat. A drawing of the testis from the same subject was also shown; it was markedly fibrous. The other drawings contributed by Dr. Sutton included Disease of the Lung (a greyish consolidation) from a subject of laryngeal syphilis; one of Ulceration of Larynx; two of Syphilitic Disease of the Liver, contrasting gummata and cirrhosis; and one of Gumma in the Kidney.—The PRESIDENT, remarking upon the importance of the second case, inquired whether any observation of the smaller arteries had been made.—Dr. TURNER thought they had not been minutely examined.

Dr. GREEN exhibited a specimen of Syphilitic Disease of the Lung, removed from a young man, who also had a well-marked gumma in the liver. The lower lobe of the lung was occupied by a mass of induration of the size of a small orange, passing gradually into the surrounding tissue, not involving the extreme base nor reaching the surface anteriorly, but posteriorly, where the pleura was thick and puckered. The diseased portion was of greyish-red colour, very fibrous, and appeared to have started from three or four centres. The microscopical sections (which were shown at the previous meeting) presented the ordinary appearances of syphilitic growths. At the peripheral portion were many new vessels, and the new small-celled growth appeared clearly to originate around the interlobular vessels, and thence to invade secondarily the walls of the alveoli. The peculiar naked-eye characters of the specimen, and the presence of a gumma in the liver, confirmed the view that this was an example of syphilitic disease of the lung. The disseminated fibroid changes met with more commonly, as in the specimens shown by Dr. Goodhart, bore some resemblance in their microscopical characters and mode of origin to the present specimen, which was rather of the nature of a gumma. He thought that, in determining the syphilitic nature of these indurated lungs, naked-eye appearances should have more weight than histological characters, for he agreed with Dr. Goodhart that histologically they were indistinguishable from other forms of pulmonary fibroid

induration—e.g., in chronic phthisis, chronic pneumonia, &c.; and this absence of anything distinctive holds true of the minute structure of all syphilitic formations. The only exception to this lay in the endarterial changes described by Heubner and by Dr. Greenfield, but there was no evidence at present that such endarteritis occurred in the lungs in syphilis. He thought, however, some distinction might be found in the mode of origin of the new growth, which appeared to take place first in the interlobular septa, and to be rather periarterial than peribronchial; whereas in chronic phthisis the change is first in the alveolar walls and small bronchi and secondarily in the interlobular septa. So in chronic pneumonia, although the difference was less obvious, the change commenced in the alveolar walls; and the same was true of other forms of pulmonary fibrosis—e.g., those resulting from chronic bronchitis and the like. At the same time the vascularity of the new tissue in the syphilitic growth was also remarkable. However, the distribution of the growth was as much an indication of its nature as its minute structure. With respect to the relation between syphilis and phthisis, Dr. Green said that in exceptional circumstances constitutional syphilis gives rise to gummata in the lung, which rapidly disintegrate, and lead to excavation; and that it was also probably true that syphilis gave rise to primary fibroid changes in the lung, which might end in ulceration and gangrene; but there was no evidence that syphilis ever gave rise to pneumonic consolidation, or that phthisis in a syphilitic subject differed from ordinary phthisis.

Dr. PYE-SMITH showed a series of specimens from a case of Tertiary Syphilis, illustrative of a large number of visceral changes — viz., chronic interstitial pneumonia, contraction of right and left bronchi, and general peribronchitis with dilatation of bronchia, fibrous nodes in the heart, condyloma of the dura mater, caries of skull and ulna, and chronic interstitial orchitis. The patient, a hotel-porter, forty-two years of age, came under Dr. Pye-Smith's care in the summer of 1876, with a history of cough lasting over two years, pallor, emaciation, and considerable muco-purulent expectoration. The aspect was phthisical, nails curved; there was dulness over part of the left side of the chest, rhonchus and sibilus over both lungs, and evidence of emphysema in front. He had once suffered from gonorrhœa, but there was no history of syphilis, nor any scars on the genitals. There was a loud systolic apex-bruit, the result of an attack of rheumatic fever seven years before. A cold abscess appearing in one forearm, and the patient not improving, he was admitted into the hospital, Dr. Pye-Smith regarding the case as one of chronic phthisis, affecting chiefly the left lung, and probably kept in check by mitral regurgitation. During his stay he had an attack of synovitis of the knees and pericarditis, thought to be rheumatic; and then his condition seemed to improve, but the abscess of the arm being opened, a slough of the flexor sublimis tendons appeared, and, later, necrosis of the ulna; for which, after consultation with Mr. Bryant, the forearm was amputated on December 29th. The stump was healing, and the patient much relieved, when, on the 21st of January of the present year, he suddenly became unconscious, with twitching of the left side of the face and limbs; the eclampsia returned several times, and he died about ten hours after the first attack. The post-mortem examination disproved the diagnosis, and showed a remarkable amount of visceral syphilis. There was no trace of tubercle in any organ, and, excepting rheumatic endocarditis of the mitral valve, the whole of the lesions were clearly the result of syphilis. There was a patch of caries of the frontal bone in the middle line, to which the dura mater was adherent, and from this point a thick, raised, vascular condyloma of the membrane adhered to the brain over the first and second frontal convolutions. The brain and its arteries, and the spinal cord, were normal. The larynx was unaffected, but just below the bifurcation of the trachea the bronchi were much contracted and misshapen. There was a single fibrous nodule in the upper part of the lower lobe of the right lung, which was elsewhere emphysematous; the left lung, firmly adherent throughout, was more or less solid, with crepitant regions chiefly in the middle; the consolidation was firm and grey, and was traversed by dilated tubes, with here and there points of caseation in the dense fibroid tissue. The condition appeared to arise in a chronic peribronchitis starting from the ulceration of the bronchi. The bronchial and mediastinal lymph-glands were small and not caseous. The pericardium was adherent; there was thickening and contraction of the mitral valve, which was fringed with vegetations, and also adhesion of the aortic cusps, and there were two small fibroid patches in the left ventricle. The capsule of the spleen was thick and shaggy; that of liver also opaque, and covered with minute flocculent growths, and minute fibroid growths occurred on the surface of the organ and in the portal canal. There was no trace of tubercle in the ileum or mesenteric glands, and only commencing lardaceous disease in the kidneys; the testes were fibroid. Both knees showed slight fibroid degeneration of the cartilage. Dr. Pye-Smith remarked that this is conclusive evidence that a form of syphilitic disease of the lung may resemble tubercular phthisis during life, but it should not be called "syphilitic phthisis" any more than we speak now of a psoriasis being simple or syphilitic, it is psoriasis or syphiloderma; nor of an eczema being simple or parasitic, it is eczema or scabies. Although failing in this instance, he had twice been able to distinguish, by the presence of external signs of tertiary syphilis, the true nature of apparent phthisis; in the one case the patient perfectly recovered, in the other he greatly improved under treatment by mercury and iodide of potassium. The absence of tubercles, caseous change, softening and cheesy glands, and microscopically of alveoli stuffed with catarrhal cells, and peribronchial tubercles, formed a marked distinction between this syphilitic disease and ordinary phthisis; although the fibro-nuclear growth, with numerous and large vessels, and abundant fibro-cicatricial tissue, was common to the former and to chronic interstitial pneumonia. There are, however, two unfailing contrasts—one in the associated changes in other viscera, the other in reaction to treatment. Of course true tubercular phthisis may occur in syphilitic subjects, but he believed that in syphilis there is also a chronic interstitial pneumonia, with fibroid induration and bronchiectasis, of irregular local distribution, with no tubercle and little caseous change, starting either from gummata or from thickened patches of pleura, or, as in this case, from a chronic contracting peribronchitis. This peribronchitis is associated with an ulcerative inflammation of the trachea or bronchi, or both, closely related to ordinary syphilitic laryngitis. The symptoms during life were those of chronic phthisis, but if confined to one lung or absent from the apices its true nature may be suspected, but during life the diagnosis can only be established by concomitant lesions of other organs and the effect of treatment. The case also gave support to Mr. Hutchinson's opinion that visceral and tertiary changes are in almost inverse ratio to secondary and superficial symptoms, which must have been very slight. The gumma of the dura mater produced neither headache nor other premonitory symptoms until the convulsions took place, which killed the patient within twelve hours—a fact opposed to Mr. Hutchinson's opinion advanced at the last meeting of the Society, but according with the traditional dictum of the late Dr. Bright, that when a man died of eclampsia, the tumour or other source of irritation was generally on the surface of the brain. Dr. Pye-Smith concluded by referring to the contraction of the bronchi as being very characteristic of syphilis. It had been observed by him in another case, where the trachea also was involved, and had been recorded by others.

Dr. DOUGLAS POWELL showed for Dr. SHEPHERD a specimen of Syphilitic Disease of the Lung. The clinical history of the case was that of fibroid phthisis, and examination showed much induration of the organ, slight dilatation of the bronchi, and almost total disappearance of the alveoli from thickening of their walls, scanty catarrhal pneumonia, but no miliary tubercle or grey granulation.

The PRESIDENT remarked that this concluded the list of specimens of pulmonary syphilis, and invited discussion upon them.

Dr. DRYSDALE said that since 1845, when he heard Ricord lecture on syphilitic phthisis, he had been familiar with its occurrence, and he thought the specimens showed that gummatous tumours in the lung might soften and lead to excavation. Several cases were on record, but he would mention two that occurred in his own practice. One was a young girl, ten years of age, with marked notching of incisors, stenosis of trachea, and ulceration of leg. There were physical signs of a cavity at the apex of one lung, but they

disappeared under iodide of potassium. The other case was that of a muscular man, also presenting signs of pulmonary excavation, but with a history of syphilis, and presenting perforation of the palate and affection of the testicle. Dr. Drysdale did not see any reason for disbelieving in the existence of a true syphilitic phthisis.—Dr. WILSON FOX said that his knowledge of demonstrable syphilitic disease of the lung was limited to two cases of gummata. He desired especially to urge a little caution in the recognition of syphilis as largely prominent in the production of phthisis. He knew of at least five different forms of lung disease each of which had been described as indubitably syphilitic; and in the discussion that had just taken place, nearly as many varieties of destruction of the lung had been claimed as syphilitic. There seemed now to be two forms of gumma recognised at Netley, for of the specimens shown that night one was described as resembling fœtal brain, and the other as an ordinary gumma. In the Army Medical Reports, pulmonary gummata played a large part in the returns of phthisis in the service. Thus, in the return for 1870, out of forty-one cases dying of syphilis, no fewer than 31 per cent. presented gummata in the lung; and in another report by Dr. Welch, 23 per cent. of the cases of lung disease in syphilis presented gummata; whilst out of all the cases of phthisis, 5 per cent. were examples of gumma. This might be contrasted with Dr. Goodhart's statement of 147 cases of visceral syphilis, in none of which is mention made of gummata in the lung. He (Dr. Wilson Fox) submitted whether on that one point alone the same things were not being called by different names, else how could the great difference in the records of military and civil hospitals be recognised? As to the other forms described, there was that brought forward by Dr. Greenfield, which resembled the indubitable syphilitic pneumonia of the newborn child; and there were the fibroid changes described by Drs. Goodhart, Green, and Pye-Smith. But beyond a larger proportion of interstitial growth than is usually met with in ordinary phthisis, no distinction could be made between the two kinds of affection; and he thought we must hesitate in assigning any specific character to the growth and origin of these indurations, seeing that Wagner expressly says the growth in syphilis occurs in the alveolar walls, and Virchow describes it as existing in the form of peribronchial nodules. There was danger of attributing more to syphilis than syphilis can at present claim. Dr. Goodhart had met with 36 cases of phthisis in 147 syphilitic subjects—i.e., about 24 per cent. Dr. Fox had estimated about 15 per cent. of his own cases of chronic phthisis to have occurred in the subjects of syphilis, but he had not been able to draw any line between the fibroid indurations in the lung in those cases and in the others. In fact, it seemed as if syphilis had but little effect in modifying or producing the pulmonary changes. It was another question whether syphilis determined the early production of phthisis. He believed it may produce a change in the mucous membrane in a syphilitic bronchitis, and hence there was no reason why there should not be a form of pneumonia special to syphilis; and some of these forms of pneumonia may become chronic. Such a lung as that shown by Dr. Pye-Smith was rare; he knew of two similar cases in literature associated with contracted bronchi. He doubted whether much was gained from treatment in phthisical patients with a syphilitic history. His general experience was that anti-syphilitic treatment has very little effect; and if that be true, the history of syphilitic "phthisis" differed materially from syphilitic lesions of other parts. The only definite lesion was the gumma, and that very seldom leads to destructive disease of the lung; he did not know of gummata forming cavities as were described, and thought that gummata as such were scarcely productive of phthisis.—Dr. PAYNE thought there was more in the subject than Dr. Fox seemed disposed to admit. He could remember what occurred some years ago in the case of syphilitic deposits in the liver, which a gentleman who was then surgeon to the Lock Hospital said that he had never met with; but, knowing what we do now, we know that such deposit would be unlikely to be found in that stage of syphilis at which patients are chiefly taken in to the Lock Hospital. But he believed that in collecting cases, and comparing their symptoms and post-mortem appearances, it would be found that the lung presented in syphilis as distinctive lesions as the liver does. Certain characters pertaining to syphilitic disease of the lung were, limited masses of inflamed tissue tending to consolidation, not extending over the whole lobe. The characters of the inflammation are sometimes interstitial, sometimes alveolar; mostly the two varieties were combined. The tendency of such masses was to degeneration and fibroid change, and he did not know of any other morbid process which could produce them. As to any explanation of the rarity of these changes, he would recall the fact that the lung differed largely from other organs in its varying size and expansibility, so that the same results were not so permanent in the lung as elsewhere. Thus any contracting cicatrix or inflammatory deposit on the surface of the lung did not cause a permanent depression, for the surrounding tissue soon expanded, and it was not surprising that a solid mass resulting from syphilis should become absorbed without leaving a cicatrix. The only part of the lung where such perfect expansibility did not obtain was the apex, and there cicatrices were not obliterated. Some years ago a female, twenty years of age, was admitted into St. Mary's from the Lock Hospital, suffering from pneumonia. One lung was found consolidated, and the other the seat of granulations which in no way resembled tubercle.—A MEMBER, adverting to Dr. Fox's remarks about the prevalence of syphilitic phthisis in the army, pointed out the nature of the records kept of the medical history of every soldier, whereby every occasion on which the patient was treated for syphilis was known.—Dr. WILSON FOX said that he was far from disparaging the observations at Netley Hospital, quite otherwise; he only thought that it was likely that the same things were being called by different names.—Dr. PYE-SMITH, in reply, admitted that his case was a rare one; if it were not so he would not have brought it forward. The case was not one of phthisis; there was absence of tubercle in the lung or any other organ, and no caseation of the bronchial glands. Then the other organs of the body were full of syphilis. The deformity of the trachea and bronchi was admittedly syphilitic, and associated with this was a chronic interstitial pneumonia which was surely also syphilitic. But—if he might be permitted to add a clinical argument—there were cases of pulmonary disease supposed to be syphilitic in which the good effects of treatment by iodide of potassium and mercury were obvious.

Dr. GOWERS showed part of a Brain, Spinal Cord, and Testicle exhibiting Syphilitic Growths. The brain presented old thickenings around the left fifth nerve-roots and ganglion, which, with the third, fourth, and sixth, was enclosed in indurations connected with an adherent dura mater. Other adhesions existed about the chiasma. There was an old gumma in the position of the infundibulum, and a recent growth in the left crus extending to the base of the optic thalamus. There were two recent growths in the lower cervical region of the cord, one of considerable size occupying about half its area in the posterior and left portion of the cord. For a year and a half the only symptom was an affection of the fifth and slightly of the sixth nerves; first hyperæsthesia, then anæsthesia, and wasting of the muscles of mastication. A violent and long-continued inflammation of the eyeball was excited by a slight corneal abrasion. During the last three months of his life right hemiplegia came on and increased, and the left third nerve became affected. During the last two months the arms wasted, the left arm and leg became weak, mental condition failed, and he gradually sank. Dr. Gowers remarked that the specimens illustrated two methods by which syphilis caused paralysis—by growths and by indurations around nerves, resembling in their character those caused by ordinary inflammation perhaps connected with the presence of the growths. The growth beneath the optic thalamus appeared at first isolated, and an exception to the usual condition to which Dr. Gowers called attention at the first meeting, that such growths are generally connected with some portion of the pia mater from which they appear to have sprung. On examination, however, it was found to be continuous along the crus, with a small growth close to the surface of the pons at its anterior edge, beneath the induration around the fifth nerve. As the symptom of this surface lesion so long preceded those of the deeper growth, it was reasonable to infer that the former was the starting-point of the latter. The patient had several times been remarkably benefited by iodide of potassium and by mercury, but

during the last two months of his life, these remedies in ordinary doses—forty-five grains daily of the iodide, and later mercury in addition—did not modify in the least the steady increase in the symptoms, nor, as the autopsy showed, the steady increase in growths unquestionably syphilitic in character. It seemed as if the long use of the iodide had habituated the tissue to its presence, and produced an indifference to its influence, at any rate in ordinary doses.

Dr. MAHOMED showed a specimen of Aneurism of the Thoracic Aorta from a syphilitic subject—a cab-driver, thirty-nine years of age formerly in the army, who died from rupture of the aneurism into the pericardium. The aneurismal sac had apparently been originally produced in the floor of an atheromatous ulcer; and the lining membrane of the aorta was much puckered and fibrous. The arteries of the rest of the body were also thickened; the left testis was fibroid, and the right was the seat of a greyish elastic nodule. Dr. Mahomed then quoted several statistics culled from the post-mortem records of Guy's Hospital and elsewhere, showing the greater proportionate frequency with which aneurism and atheroma occurred in the subjects of syphilis than in non-syphilitics; and the conclusion he arrived at was that although there was no specific syphilitic affection of the aorta, yet syphilitic subjects were more prone to atheroma than others.

The PRESIDENT having conveyed the thanks of the Society to the gentlemen who had exhibited specimens, the meeting adjourned.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting of this Society on Feb. 7th (Dr. West, President, in the chair) the following gentlemen were elected Fellows of the Society:—Nathaniel H. Clifton, F.R.C.S., James Crawford, L.K.Q.C.P.I. (Sevenoaks), Samuel H. Dawson, M.D., James Ford, M.D. (Eltham), Samuel Johnson, M.D. (Stoke-upon-Trent), and George Walker, L.R.C.P. Professor Stoltz, M.D. (Nancy), and Prof. E. Randolph Peaslee, M.D. (New York), were elected Honorary Fellows; and William Goddell, M.D. (Philadelphia), and Horatio Storer, M.D. (Boston, Mass.), were elected Corresponding Fellows of the Society.

Dr. PALFREY showed a Monster with two heads, three arms, one trunk, and pair of lower extremities. The heads were nearly on a level, and the two passed through the vaginal outlet at the same time.—Dr. PRIESTLEY asked what amount of traction was necessary to effect delivery; what degree of laceration was caused, and what was the state of the mother afterwards?—Dr. TIPPLE, who attended the case, replied that the woman had had local peritonitis, and a large ulcer behind the left iliac crest.—Dr. BARNES said that the longer head fitted into a concavity in the other.—Dr. HEWITT said it was evident that one head came down somewhat before the other.—The PRESIDENT referred the specimen to Dr. Hayes and Dr. Playfair for report.

Dr. GODSON showed a Fœtus at full term, of which he had delivered a woman suffering from extensive epithelioma of the cervix. The patient was seen at the commencement of labour, and it was decided to deliver per vias naturales in preference to Cæsarean section, as affording a better chance of recovery to the mother. Dilatation by Barnes's bags, turning, perforation at the occiput and cephalotripsy, were subsequently adopted; the os uteri appeared to have escaped laceration, and the woman was doing well.—Dr. EDIS referred to a case which he delivered per vias naturales. He thought, however, that in most cases Cæsarean section was preferable.

Dr. HEYWOOD SMITH exhibited three new points for Paquelin's petroleum cautery, and "Bailey's Patent" abdominal belt. The peculiarity in the belt was two slits to embrace the crista ilii, so as to prevent rucking. Dr. Smith showed also a portable Pelvimeter, which could be equally used for internal and external measurements.

The new volume of Transactions was presented to the Society.

The President then delivered his address.

Mr. R. HICKMAN (Newbury), narrated two cases of Inversio Uteri. Both cases were attended by midwives, and the cause of the inversion in each case is uncertain. In both cases the uterus was readily returned to its normal position. In one the woman did well, in the second the patient died soon after the reduction.

Dr. R. ELKINGTON (Brockville, Ontario), mentioned a case of Spontaneous Inversion of the Uterus. Labour was natural. On the third day the uterus became suddenly inverted, owing apparently to the exhibition of a large dose of castor oil. It was easily reduced, and the patient did well. The author thought that unequally distributed pressure on the fundus of the uterus, after expulsion of the placenta, occasionally gave rise to partial inversion.

Dr. CLEMENT GODSON narrated cases of Inversio Uteri. A patient thirty-one years of age had an easy labour with her first child two years and a half ago. From that time she felt a lump in the vagina, which appeared to be lower during the menstrual epochs. She was very weak and anæmic. On examination the uterus was found to be inverted. Dr. Greenhalgh and Dr. Godson made four different attempts at reduction by taxis, but without success. A plug of glycerine of tannin and an air-ball pessary were introduced into the vagina with a view to gradual reduction, but they had to be removed owing to profuse hæmorrhage. Finally, the uterus was removed by the écraseur. The patient lost but little blood, and made a rapid recovery. Another patient had had a long and difficult labour two years and a half ago. She lost much blood after the labour, and off and on until she came under observation. On examination the uterus was found inverted. Repeated attempts at reduction by taxis were made, but they proved unsuccessful. Owing to the persistence of the hæmorrhage, and the gradually increasing exhaustion consequent on it, amputation was decided upon. This was done by the écraseur without loss of blood. The patient made a good recovery.

Dr. HEYWOOD SMITH read a paper on a case of Inversion of the Uterus. The patient, aged thirty, was delivered of her first child by forceps three months before. The placenta was removed with some force. The bowels remained unrelieved for eleven days. An enema was administered, and during the straining which followed the womb appeared to have become inverted. From that time she had a more or less constant sanguineous discharge. On examination the uterus was found inverted, the orifices of the oviducts being felt. The patient was put under the influence of chloroform, and reduction was attempted in the way generally recommended, by constriction at the neck of the uterus and pressure at the point of flexion. Pressure was then made on the fundus, while counter-pressure was exercised above the pubes; but although a deep depression was made by this means, it failed of success. The whole organ was then pressed so as to squeeze the blood out of it, and the tip of the finger was passed into the right oviduct. Reinvagination commenced under the tip of the finger, and in a short time the uterus was restored to its position. The patient made a good recovery. The author was of opinion that the only rational method of reduction is to begin at the insertion of an oviduct.

Mr. W. H. MABERLY followed with a case of Inversion of the Uterus. The patient, aged twenty-one, had had one child. The labour was easy, but was followed by profuse hæmorrhage. Afterwards she was the subject of menorrhagia. Dr. Greenhalgh found the vagina relaxed and capacious and the uterus inverted. Three attempts at reduction were made by Drs. Greenhalgh and Godson, but without success. The uterus was removed by the écraseur. The night after the operation, profuse hæmorrhage took place, which was arrested by the application of ice to the abdomen and vagina. Recovery was slow.—Dr. SMITH asked what method of manipulation was adopted.—Dr. GODSON said that general pressure was first used to expel the blood from the organ, and then pressure on one spot by the thumb. In one case the orifices of the oviducts could not be found, in the others they were extremely small.—Dr. AVELING thought, in returning inverted uteri, it was a point of great importance what part of the fundus should receive the upward pressure. He had, in a case of only ten days' standing, been unable to force the fundus through the cervix until that portion which corresponded with the insertion of the Fallopian tube was specially

selected for pressure.—Dr. BRAXTON HICKS said the difficulty lay in the fact that the uterus was in most chronic cases shrunken and small, and its tissue was so dense that it was not possible to indent it. Sudden reduction was not free from danger, for he had seen collapse take place while pressure was being made. He thought the slow method of reduction the best.—Dr. ROBERT BARNES said that recent cases could be reduced by the hand. It was advisable to swab the interior of the uterus afterwards with a styptic. Chronic cases are best treated by the slow method of constant elastic pressure, and not by brute force. Placing an air-bag in the vagina is not enough. An elastic ring should be placed round the uterus, and pressure exercised from the lower part of the vagina. If this fails, small incisions should be made in the constricting part, and elastic pressure applied again. Amputation is not without danger to life, and it is a mutilation of the woman.—Dr. STORER, of Boston, said that in America the inverted uterus was looked upon, not as a fibroid, or a polypus, the removal of which if possible was a duty, but as an important part of the body, to be replaced and preserved, and that operations for its removal were had recourse to only when cure was hopeless. Inversion is occasionally complicated by the presence of a fibroid. This fact throws some light on the causation of inversion otherwise doubtful. When such existed, uterine contractions after labour would be almost necessarily irregular, and might force the fundus downwards. It would also impede reduction after long displacement. Irregular contractions, even from slight causes, might cause inversion.—Dr. EDIS called attention to the comparative frequency of cases of inversion. Judging from the cases recorded, this greater frequency is comparatively of recent date. He thought this was probably due to the employment of too much or of ill-directed force on the expulsion of the placenta. The treatment would vary according to the length of time which had elapsed since the inversion took place, and other circumstances, but amputation should only be done as a *dernier ressort*, when all other means had failed.

Reviews and Notices of Books.

Manuel Pratique des Maladies de l'Enfance. Par A. D'ESPINE, Professeur de Pathologie interne à l'Université de Genève; et C. PICOT, Médecin de l'Infirmerie du Prieuré à Genève. Paris: J. B. Baillière et Fils. 1877.

THIS little manual aims to supply a want which is equally felt in France and England. The literature of diseases of children is sufficiently voluminous, but the majority of the works are either partial in their scope, or are mainly the result of individual experience. What is needed is a work which shall embody the various views of different writers and the most modern clinical and pathological observations in a readable form, and in such a manner as to be of practical value.

The present work does not pretend to entire originality, the authors having drawn largely on the classic writers upon the subjects of which they treat, modifying their statements by the results of their own not inconsiderable experience of children's diseases. They especially mention the works of Barthez and Rilliet, West, Meigs and Pepper, and Gerhardt, as having served as their chief storehouses. The plan of the work is excellent. An introductory section gives an account of some of the more important normal physiological conditions of infancy, such as the size, weight, temperature, &c., periods of dentition, food required at different ages, and the like, and this is followed by a careful and succinct account of the mode of examination of infants and children, and the differences to be borne in mind in the administration of medicines. In the account of each disease separate sections are devoted to etiology, description of the clinical features, anomalies, complications, including sequelæ, pathological anatomy, diagnosis, prognosis, and treatment, in some cases preceded by a brief historical account. The topics under each heading are very clearly discussed, and each section is preceded by a concise bibliographical account of the works referred to in such a manner as to be very easy of reference.

As a rule, only those diseases which are peculiar to infancy, or which present special features, or are of more common occurrence during infancy and childhood, are treated of with any fulness, and as a consequence more than one-half of the work is occupied with the consideration of general diseases, fevers, and nervous diseases. We may say that, on the whole, the descriptions of the symptoms and complications of each disease are very good and clear; those on the pathological anatomy are also for the most part good, and in some cases—e.g., that on diphtheria—excellent. But the sections on treatment are for the most part but little calculated to guide the inexperienced or doubtful, consisting, as they do, of a long list of everything which has been recommended for the disease, or of generalities from which all special directions are absent. There are, also, statements based on a too exclusive experience of children's diseases only. Among the most elaborate articles is that on Diphtheria, which occupies forty pages. The authors follow of course the French school in recognising no distinction between croup and diphtheria, whilst allowing that the croupal form is more common in infancy; and although they describe primary and secondary forms, the latter as occurring in hospitals as a sequel of scarlet fever, measles, and typhoid, they ascribe all equally to a "specific miasm," the existence of which they consider as generally admitted. Diphtheritic angina and croup are described separately as to their clinical features, and the directions for tracheotomy and the after-treatment are very good and reliable. The article on Infantile Syphilis also strikes us as being particularly good. We must point out one or two other errors or omissions, possibly due to oversight or haste. Typhus fever is not mentioned at all, although small-pox is fully described. In the account of typhoid fever (the name "enteric" not being even mentioned) there occurs the statement that the only pathognomonic sign of the malady is the eruption of lenticular rose spots, in their absence no positive diagnosis being possible—a statement which, if true, would reduce the chances of diagnosis to a minimum. Under the heading of Morbid Anatomy, enlargement of the spleen in typhoid is not even mentioned, and ulceration of the bowel is said to be rare. In the treatment of rheumatic fever hypodermic injections of morphia are recommended amongst other drugs, without any special caution. In discussing tubercular meningitis, it is stated that the pulse is always regular in the first stage, that the temperature always rises towards the termination of the case, and that death rarely occurs before the fourteenth day from the onset of acute symptoms, to all of which statements we should be inclined to give an unqualified contradiction. The authors had evidently not rea[illegible] article in Reynolds's System of Medicine, or they would have been more guarded in their statements as to the temperature. But, in spite of these and other errors, we must congratulate the authors on having produced a work of much value, especially to the student, and the few defects may readily be remedied in a subsequent edition.

British Seamen. By THOMAS BRASSEY, M.P. London Longmans, Green, and Co. 1877.

THIS book is the work of a man very distinguished in the commercial world, and one whose opinion on this, or any kindred subject, is specially entitled to respect. The author describes it as a compilation only, made "amid the various and unceasing calls of public and private duty." It may be acknowledged that such a work has been long wanting.

a book that shall place before the public the real aspects of, so to speak, the "maritime question," apart from political, "Plimsollian," Imperial, or penurious proclivities. Hence the book must be welcome, although, as is acknowledged by Mr. Brassey, it consists mainly of large borrowings from Blue-books, and from information supplied by the Board of Trade and by many eminent shipowners. But the result of a careful perusal of sanitary work in connexion with seamen is somewhat disappointing. The work is not up to date. As scurvy is a subject of prominent interest just now in connexion with the Arctic Expedition, we turned for specific information as to this point, but find only extracts from a philanthropic society quite ten years old, and the *Dreadnought* statistics brought up to pretty nearly the same date. Since that time Blue-books on "Dietary Scales" and "Accommodation of Seamen" (two at least of each) have appeared—we think in 1868 and 1869,—and official reports on scurvy have also appeared. In June or July of last year a most valuable Parliamentary paper was published, headed "Merchant Ships; Health of Seamen," which gave full details, as well as carefully compiled summaries, of all official inquiries on the health of seamen that had been held during the past three years. But no particulars or deductions appear from any of these documents, so that, as to sanitary subjects, the work fails to show, up to the present date, how much or how little good the "health" clauses of the Duke of Richmond's Act, passed in 1867, have accomplished. This is the more to be regretted because, had these papers been studied, we believe that the author, with his specially clear and candid style of reasoning, would have seen the importance of urging, both in print and in Parliament, a modified but obligatory medical examination of ships' crews.

Mr. Brassey might also, in his valuable chapter on the *pros* and *cons* of training ships, have gleaned some important particulars on the sanitary aspect of these establishments by consulting the 5th Report presented by the Port Sanitary Committee to the Corporation of London in the spring of last year. "British Seamen," however, contains much valuable matter, tersely put together in the author's eminently practical style, and there are evident signs in it that Mr. Brassey believes in the superlative importance of providing seaworthy sailors as well as seaworthy ships—i. e., if our commercial prestige is to continue, and casualties afloat are to decrease.

REPORT
OF
The Lancet Sanitary Commission
ON
ENGLISH WATERING-PLACES.

VENTNOR.

SINCE Sir James Clark descanted graphically upon the climatic advantages of this beautiful little town, the reputation of Ventnor as a health resort for pulmonary invalids has increased and has been maintained to an almost unrivaled extent. A little more than half a century ago it would have been properly described as a minute fishing village, with perhaps not a hundred inhabitants. Five years ago its population numbered nearly five thousand persons, and since that date it has increased certainly more than a fifth.

The natural configuration of the southern portions of the Isle of Wight must be familiar to most of our readers. Ventnor is built on chalk resting on the greensand, is surrounded with chalk cliffs, and has from the same formation a bountiful supply of water on every side. It is protected by the Undercliff from the north, north-west, and in many places also from the east and south-west winds; but most of the town has a south by south-east aspect, so that the east winds are by no means entirely excluded from the elevated terraces under the cliff. Sir James Clark, in his treatise on the "Influence of Climate," says, in writing of the Isle of Wight, "The part most recommended is that denominated the Undercliff, on the south-east coast, about six miles in length, and from a quarter to half a mile in breath. The whole tract is singularly well protected from the cold, and it would be difficult to find in any northern country a district of equal extent and variety of surface, and, it may be added, of equal beauty in point of scenery, so completely shielded from the cutting north-east winds of the spring on the one hand, and from the boisterous southerly gales of the autumn and winter on the other." To the natural advantages briefly recapitulated above may be added great facilities for good drainage and sewerage.

There appear to be both a summer and a winter season at Ventnor, but from personal observation, extending over eighteen years, it seems to us that the stream of visitors, though less in the winter, is almost continuous. Many invalids reside in the place from October to April.

Drainage.—A very large proportion of the houses are connected with the drainage system, but in some outlying terraces cesspools still exist, the number of which is as yet undetermined. Dr. E. R. Woodford, medical officer of health for the town, has, during the past few months, in conjunction with his inspector, been conducting a house-to-house visitation of the entire district, which is not yet completed. It appears that of 268 houses visited, 257 drained into the common sewer and 11 into cesspools. In 69 instances air is described as being felt entering the house from the drains, showing, we suppose, that the latter were inefficiently trapped, or not trapped at all. The ventilation of both main and house-drains, except into the houses, appears to be almost *nil*. The main drains are, in scattered places along the roads, fitted with charcoal ventilators. But an examination of several of them in the middle of the town led to a very decided impression that they were blocked, and hence useless. (We may observe here, parenthetically, that all ventilators opening upon the road or street level are very objectionable, and in the case of a town frequented by invalids exceedingly unhealthy.) There is, according to observation and information received, absolutely no pipe ventilation of either main or house-drains, except in the case of the Crab and Lobster Hotel, a charmingly comfortable establishment, as old as the town itself. This house has, during the past year, been partially rebuilt, and the proprietors insisted upon the application of a proper system of traps, and pipe ventilation in connexion with all their closets and drains.

The outfall of the main sewer, which discharges into the sea, is placed in a superlatively objectionable position. The Ventnor visitors are of course supplied with a pier and a bathing place, but, on account of the peculiarities of the coast-line, in parts of the town the latter is very contracted as to superficial area, being really (though unavoidably) a mere "bit of beach," albeit very conveniently situated, immediately under the town, and close to the esplanade. The inscrutable proclivities of the local sanitary authority have, however, so directed the line of drainage that the outfall of the main sewer discharges itself immediately in front of the bathing-machines, and at the same time offers, free of charge, a grateful aroma to loungers on the pier. This is one of the most curious results of local self-government that has come under our observation for a long time, and we commend it to the commercial consideration of the bathing-machine and pier-proprietors.

Water-supply.—The supply of water is furnished by a company. Analyses made by Dr. Hassall show that it is very excellent in quality, and that the supply obtainable is practically unlimited. This capital water may be seen at all hours of the day flowing away through the rocks to the sea in the middle of the town as well as at several other spots in the immediate vicinity. But in spite of these un-

usual advantages the following unsatisfactory facts were gleaned:—Of 268 houses lately visited by the officers of the local sanitary authority, occupied by 1532 people who lived in 1489 rooms, 126 houses were supplied with cisterns, 33 were supplied direct from the mains, and 133 (50 per cent. of the houses visited) *were not connected with any water supply at all.* No less than 61 complaints were made of intermittent water. Water in houses in the Newport road (some way up the hill), with no cisterns, was said to be supplied for only 2 hours a day. On the Long down the water is sometimes "off" for 4 or 5 hours a day during 5 days in the week, and for many more hours during the other two days, and is frequently very turbid and offensive when first turned on. As a matter of course, under these circumstances, many pipes supply air as well as water, and in many houses where cisterns existed the same cistern supplied the closet and furnished a tap for general use. And, lastly, the contents of certain privies and pigsties near the railway station are observed occasionally to find their way down through fissures to the land immediately above the reservoir.

Closets.—The 268 houses visited were supplied with 292 closets and 9 privies, which, under ordinary circumstances, would indicate a fair amount of accommodation. But, inasmuch as 133 of them were not connected with any water-supply, it is difficult to see how the contents of the closets can be satisfactorily disposed of without the creation of a very decided if not dangerous nuisance.

Prevention of disease.—There is no hospital accommodation of any kind at Ventnor, except the Royal Consumption Hospital about a mile out of the town, which is not, of course, available either for general cases, or for those of a contagious and infectious kind. The town has hitherto been very free indeed from all epidemics, in spite of the influx of strangers. The senior resident practitioner, a man of very wide and varied experience in all matters relating to Ventnor, as well as the island generally, told us that cholera had never at any time visited the town during the epidemics of the disease, though it found its way into most places on the island, and came so close to Ventnor as Sandown, Shanklin, and even Wroxall. We were, naturally, not surprised to find that enteric fever, when it occurred, was usually found in those houses where the water-supply was scanty or non-existent.

We have pointed out in the foregoing remarks pretty plainly certain sanitary arrangements that are obviously and grossly defective. We reiterate, in common with many who know Ventnor well, that there is no more delightful resting-place in the United Kingdom, whether for the temporary invalid, the confirmed invalid, or the busy overworked Londoner. And when, as is proposed, the journey is diminished by at least an hour, many more of the latter (as well as the former) classes will go down for a brief modicum of quiet idling. Hence it is lamentable to see that the ratepayers and their representatives, instead of taking steps to improve the sanitary condition of their town, and so to attract visitors, spend time, money, and "ludicrous" language on some little scrap of sea-wall or on the conduct of a reporter. If Major Tulloch, in his recent official visit, had been accompanied by a member of the Medical Department of the Local Government Board, we opine that the latter officer would have found something to engage the attention of the authorities of more immediate importance than the erection of sea-batteries or the construction of cliff and esplanade paths. As no official *sanitary* visit has as yet been vouchsafed to the inhabitants, we take leave to commend to their earnest attention the importance of the following points:—

1. To make provision for a constant supply of water, or failing this, cistern accommodation to all houses in the district.

2. To move the drainage-outfall considerably further to the eastward, so as to be quite clear of the bathing-cove and pier.

3. To fill up all cesspools, trap house-drains, and ventilate them on the pipe-system, and flush the main drains frequently and systematically.

4. To provide some sort of hospital accommodation for cases of infectious or contagious disease. In the case of so small and healthy a town as Ventnor, a small plot of land, with provision for the immediate erection of a temporary building, would be all-sufficient; and as Bonchurch is practically united to Ventnor, and would be equally affected by any epidemic that might arise, the co-operation of this authority in the scheme should be obtained.

In compiling this report we have to acknowledge cordially the information afforded by the chairman of the local board, the medical officer of health, and others. For, as no sanitary reports are printed and circulated (as we think, very unadvisedly), it is necessary to obtain knowledge of sanitary matters through somewhat indirect channels. The time must before long arrive when local boards will discover the wisdom of giving the knowledge gleaned by them in a corporate capacity all proper publicity. The results to Ventnor, as to other towns, of the "bottling up" system have not been happy, and cannot in the long run conduce to satisfactory sanitation.

Analytical Records.

GRANULAR EFFERVESCENT SALICYLATE OF SODA. GRANULAR EFFERVESCENT SALICYLIC ACID.

(SAVORY AND MOORE, NEW BOND STREET)

A short time since we recommended to the profession a granular effervescent preparation for the more convenient administration of salicin. We now call attention to two articles of a similar kind made by the same firm. These preparations have the same proportions as the effervescent salicin noticed in this journal, page 185; the granules are well formed, briskly effervescent, and the active ingredients are thoroughly diffused, and not in loose powdery crystals. They are consequently, in our opinion, excellent media for exhibiting the important remedies they contain.

DR. CLIN'S CAPSULES OF MONOBROMIDE OF CAMPHOR.

(14, RUE RACINE, PARIS; ROBERTS AND CO., NEW BOND-STREET, LONDON.)

The samples of Clin's capsules of monobromide of camphor which have been presented to us for examination and analysis are a good specimen of pharmaceutical preparation. The capsules are all identically the same, perfectly well made in shape, with a thin gluten wrapper, containing twenty centigrammes, or about four grains, of bromide of camphor, dosed with great care. We have found the monobromide of camphor quite pure. The gluten wrapper is an excellent idea, and deserves to be specially noticed in this preparation of Dr. Clin's, as it melts easily in the stomach, and thus permits of the substance being ingested in its simplest and purest form.

OPIATINE.

MESSRS. GALE AND CO., wholesale druggists, 15, Bouverie-street, E.C., have introduced to the notice of the profession a preparation of opium which they term Opiatine. It is prepared in such a manner as to ensure the presence in an unvarying amount of the salts of morphia and codeia, the inert principles and impurities of the drug being carefully separated. Thus the active constituents are presented in a uniform and concentrated condition. Opiatine is a powerful anodyne, sedative, and soporific, and it will probably be found that recourse may be had to its use in certain cases where the exhibition of the ordinary preparations of opium is precluded on account of the well-known constitutional disturbances they are apt to produce. The dose for an adult ranges from ten to thirty minims. The preparation is likely to become popular.

DUSAULE'S PREPARATIONS OF SALICYLIC ACID.

(A. BRULEY, PARIS.)

Of the above preparations, we have received and examined the following:—(1) *Salicol Dusaule*, a pink-coloured, agreeably smelling solution, intended to replace carbolic acid as a disinfectant. It is not poisonous or corrosive, and is

admirably adapted for medical and domestic use. The use of salicylic acid as an antiseptic seems to be spreading rapidly. (2) *Glycérine Dusaule*, which contains 3 per cent. of salicylic acid. This is, of course, for external application, and will be useful in skin diseases, the dressing of burns, &c. (3) *Pastilles Dusaule*—pink lozenges of pleasant flavour. Each contains five centigrammes (about three-quarters of a grain) of the acid. They are recommended for complaints of the throat and lungs.

CALLARD'S IVORY JELLY.

(CALLARD, ST. JOHN'S-WOOD, LONDON.)

This jelly, which contains phosphates in notable quantity, is said to be prepared from ivory dust. It is delivered in the fresh state every day, is very delicate in flavour, and well adapted for invalids.

SATURATED SOLUTION OF SULPHUROUS ACID GAS IN ALCOHOL.

(HERRINGS AND CO., ALDERSGATE-STREET.)

This preparation deserves great praise. The solubility of sulphurous acid in alcohol is, it is well known, much greater than in water. Messrs. Herrings' solution contains one hundred times its volume of the gas, and the gas is evolved in large quantity on exposure to the air. The solution is therefore applicable to all the purposes for which sulphurous acid is used, either as gas or liquid. It may be employed as a disinfectant for wearing apparel in boxes or closets, as a deodoriser in rooms, sculleries, &c.; as an antiseptic, to prevent putrefaction, as a parasiticide, or as a gargle. For all these purposes its value cannot be doubted. It might also be used to disinfect rooms after infectious disease, but unless the walls, ceilings, and floors were washed with it, or unless a very large quantity were exposed to the air, the protection afforded would, we fear, be insufficient.

SELLERS'S MISTURA BISMUTHI COMP.

(MACKEY, SELLERS, AND CO., BOUVERIE-STREET, FLEET-STREET.)

This mixture contains bismuth, chloric ether, nux vomica, hydrocyanic acid, and hydrochlorate of morphia. It mixes with water without precipitation of the bismuth, and is undoubtedly a useful preparation.

ST. RAPHAEL TANNIN WINE.

(COMPAGNIE DU VIN DE ST. RAPHAEL, VALENCE, FRANCE; AND 27, MARGARET-STREET, REGENT-STREET.)

The addition of an iron salt shows at once the large quantity of tannin present in this wine, or rather cordial. In flavour the preparation resembles a fruity port. It leaves no roughness on the palate, and is, in fact, a very pleasant form of tonic.

SERUM SANGUINIS EXSICCATUM.

(THOMAS FORE, 20, MARKET-SQUARE, BIRKENHEAD.)

A powder correctly described by its title. We presume it is not offered as a novelty except as regards its application to medicine. It is suggested that it may be used as a nutrient in wasting diseases, as an emollient, as a dressing, with water and oil, and in several other ways. Of course it consists mainly of uncoagulated albumen, and may therefore be used whenever albumen is wanted.

LANGOIRAN WINES.

(A. COINDREAU AND CO., LANGOIRAN; AND 72, NEWMAN-STREET, OXFORD STREET.)

These clarets are sent to us as being particularly dry, and therefore especially suitable for invalids. Our analyses, and the still more important process of tasting, show that they are good sound wines, free from sugar, and pleasant in flavour; but we confess we fail to see that they possess any very unusual merits. The White Graves appeared to us the best.

BARON LIEBIG'S MALTED FOOD EXTRACT FOR INFANTS.—MALTED FOOD EXTRACT FOR ADULTS.—MALTED EXTRACT LUNCH AND DESSERT BISCUITS.

(SALMON BROTHERS, 94, MILTON-STREET, LONDON, E.C.)

The first of these preparations is so well known as hardly to require notice, but the results of its use at the British Infants' Institute, which are given in the circular that accompanies each tin, are certainly remarkable. It is stated that out of 1000 children (from birth to five years) fed exclusively on the extract, only four died in a year. If this statement is literally correct, the fact is wonderful; but we find it difficult to believe that children of five years old were fed *exclusively* on the food extract.

The biscuits are very hard and not particularly palatable to our taste, but of course they possess all the advantages of malted food.

CHOCOLATINE.

(MONTAUBAN AND CO., LONDON.)

A good and pure preparation, containing but little fat and no starch. It yields a thin and pleasant cup of chocolate.

ANALYTICAL WORK OF THE INLAND REVENUE.

THE nineteenth Report of the Commissioners of Her Majesty's Inland Revenue, in which is embodied the Report by the Principal of the Laboratory, was issued last week. It appears that during the year ending March 31st last, 14,032 samples of different articles were examined. The Customs samples amounted to 2779, and consisted chiefly of tobacco, snuff, and wines. Of 55 samples of wine, 24 were found to contain only a small proportion of genuine wine, and some were absolutely undrinkable. A bewildering amount of sophistication seems to be going on in wines and spirits, to the no small prejudice of the British public. Allusion is made to the responsible duty imposed on the Board's chemical staff by the Sale of Food and Drugs Act, of acting as referees in disputed cases, five of which were brought to the department in the year. We here find it stated that milk and butter vary much more in composition than is commonly supposed, and that genuine samples were to be met with in commerce which in quality were considerably below the standards adopted by the Society of Public Analysts. For the Admiralty 162 specimens of beer and wine destined for hospital use and ships' stores were tested with varying results. We will here express a hope that the examination of substances intended for our sick soldiers and sailors will always be most rigorous and thorough. Under the heading of lime- and lemon-juice and spirits, it is stated that there was a considerable falling off in the number of samples; the diminution being partly ascribed to the recent serious depression in the shipping trade. The quality of the juice presented was fair, only 13·5 per cent. of lime- and 10·9 per cent. of lemon-juice having been rejected as unfit for use. The mineral acid usually present was muriatic acid, and this is accounted for by the fact that casks had been used which had previously contained salted provisions, and which were not freed from the salt when the lemon-juice was put in. Altogether, a marked improvement was found in the quality of these juices. The work performed for the India Office was large, 1144 articles having been examined, including quinine, mercury and its salts, camphor, brandy, &c. It will be a matter of general regret that tobacco showed a larger amount of adulteration than that recorded in the previous year. Of the 244 samples examined, 171 were for the Excise and 73 for the Customs. Of the former lot, 46 samples were genuine and 125

adulterated; the adulterants being liquorice, sugar, colouring matters, and gum. In the article of beer a great improvement was visible. No sample examined showed the presence of any hurtful or deleterious ingredient; the "doctoring," in fact, not going beyond the use of sugar, treacle, &c. Year by year we find the scope of the fraudulent trader limited; and a perusal of the present Laboratory Report will afford convincing proof of the efficacious working of the Adulteration Act.

THE PRINCE OF WALES AT THE COLLEGE OF SURGEONS.

AFTER the delivery of the Hunterian Oration, his Royal Highness returned to the College, and was entertained at a banquet by the President, Mr. Prescott Hewett, and the Council. Amongst the other guests were the Dukes of Richmond, Manchester, and Sutherland, the Bishop of London, Sir James Hannen, the Right Hon. W. E. Gladstone, Sir H. Thring, Sir Dighton Probyn, Sir Rutherford Alcock, K.C.B., Sir S. Waterlow, Lieutenant-Colonel Henderson, C.B., Captain Shaw, Mr. W. Leighton, R.A., Mr. A. Elmore, R.A., Mr. J. C. Powell, Q.C., Mr. F. Knollys, C.B., Professor Owen, C.B., Paget, Tyndall, Huxley, Parker, J. Wood, Mr G. Goldney, M.P., Mr. W. St. J. Wheelhouse, M.P., and nearly all the members of the Council and Courts and Boards of Examiners of the College.

After the usual loyal toasts, to which the Prince responded, and feelingly and gracefully expressed his indebtedness to the members of the medical profession, "The memory of John Hunter" was drunk in silence.

"The Army, Navy, and Reserved Forces," proposed by the President, was responded to by General Sir William Knollys, who, in regretting that the Duke of Cambridge was not present, said that from his long connexion with a brigade of Guards he knew the sterling qualities of the British soldier, and fully recognised the services of the army surgeon, so needful to all, from the General to the drummer-boy. Rear-Admiral Lord Gilford thoroughly appreciated the sacrifices made by medical men in his department of the public service, instancing the case of a naval surgeon on the West Coast of Africa, with no books, no references, no consultations, with nothing in fact, and yet how admirably all his duties were carried out.

"The Church" was eloquently proposed by Professor Humphry, of Cambridge, who, in a long speech, reminded his hearers that a sound body was the necessary accompaniment not only of the sound mind but of sound morals. Any degeneracy of the physical in a nation was sure to be followed by a deterioration of the national morality, as any lowering of the moral was a certain prelude to the undermining of the physical; the two acted and reacted on each other, and the sciences must go hand in hand in their common work of advancing the moral and physical standard of mankind. The Lord Bishop of London responded.

"The Bench" was proposed by Sir James Paget, and responded to by Sir James Hannen.

"The Universities and Medical Corporations," proposed by Mr. John Birkett, the senior vice-president of the College, was responded to by the Rev. Dr. Barry, of King's College, for the former, and by Dr. Bennett, the president of the Royal College of Physicians, for the latter. Canon Barry said that, as places of education, our universities had done their work well, and were second to none. If, as places of research and study, they did not occupy a position abreast of the universities of other lands, he trusted for correction of their shortcomings not so much to the intervention of law, which must be rough and imperfect, as to the force of enlightened public opinion, which such an assembly as that he addressed so powerfully represented. Dr. Bennett said it was needless in the place where they were then assembled to speak of the value of our medical corporations and the claims they had on our attachment as a profession; nor was it necessary, after listening to the oration, to set forth their claims to the consideration of the Government of our country and the public at large. However enthusiastic we might be in the cause of medical reform, we thought it better not to hurry beyond all bounds, but patiently strive to work out those ameliorations which in the calm judgment of sober Englishmen might seem to be called for. That we should ultimately succeed in some form or other in attaining those objects which had of late occupied so much of our time and thought could not be doubted, but whatever changes might await us in the future, he trusted, for the sake of learning, science, and humanity, that the Royal Colleges of Medicine and Surgery would continue to flourish and long boast of their Harveys and Hunters, that the orator's and presidential chairs of the College for generations to come would be occupied and adorned by Pagets and Hewetts, and its marvellous museum remain the admiration and glory of the civilised world.

"The Hunterian Orator," proposed by the Right Hon. W. E. Gladstone, M.P., was one of the most interesting speeches of the evening. He said that he had acquired more information that day in one hour from Sir James Paget than he had ever acquired before in a similar period of time; but with regard to one statement that Sir James made as to the intimate relation between mind and speech, he wished he could get him (Sir James) to accompany him to a house which he much frequented, and he felt sure that he would admit that such statement did not always hold good.

In reply, Sir James Paget said that he would not attempt to thank Mr. Gladstone for the very flattering way in which he had proposed his health. "Speech was silvern, and silence was golden," and he must ask them to accept the latter.

The last toast, that of "The Royal College of Surgeons," was proposed by H.R.H. the Prince of Wales. The President, Mr. Prescott Hewett, replied.

The company then adjourned to the Museum, which was brilliantly lighted for the occasion. Here His Royal Highness was conducted over the collection by the President and Professor Flower, the conservator, the latter of whom explained some of the objects of especial interest to the Prince, amongst which was that of the first tiger which he shot at Jeypore during his recent visit to India, the bones of which he had directed to be preserved and presented to the College. His Royal Highness remained in the Museum till a late hour inspecting every part of it, and, on leaving, expressed the great pleasure he had derived from his first visit to this magnificent collection, and the hope that he might before long find an opportunity of repeating it.

EDINBURGH UNIVERSITY CLUB.

THE annual general meeting of this Club was held on Monday, the 13th inst. The hon. secretary, Dr. Farquharson, read the report, which showed that the Club still continued in a prosperous condition, though death had been busy during the year, and in the obituary list some well-known names were included, to which a fitting tribute was paid—Dr. Laycock, Dr. Sibson, Sir James Bardsley, and others. It was unanimously resolved that a letter of condolence be sent to the family of the late Sir W. Fergusson, who took a great interest in the affairs of the Club, and had on more than one occasion presided at its gatherings. The members dined together afterwards under the presidency of Dr. W. Playfair, who was supported by about thirty-one members and guests. Among those present we noticed Deputy Inspector-General Combe, R.A., Surgeon-Major Orton, the Right Hon. Lyon Playfair, M.P., Rev. Cosmo Gordon, D.D., and Drs. Cobbold, Dunn, Withers Moore (Brighton), &c. The chairman, in proposing the toast of the evening, claimed for the Edinburgh School the most important discoveries of the present day—namely, anæsthesia, and the antiseptic system of dressing wounds.

VINCENT-SQUARE HOSPITAL.—The annual meeting of the friends of this hospital was held on Wednesday last, Lord Hatherley in the chair. It appeared from the report that, although the subscriptions and donations had increased somewhat during the past year, the expenditure exceeded the income by £183.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 24, 1877.

MR. SECRETARY CROSS has apparently taken up a position in regard to medicine which promises well, and the profession will hail with warm gratification. In assenting to a return of licences granted under the Cruelty to Animals, or Vivisection, Act of last session, he declined to give the names of "persons of the highest standing in the medical profession" to whom certificates for experiments had been confided. At the same time Mr. CROSS expressed his confidence that when the returns were presented, "the House and the country would be prepared to acknowledge the willingness which the medical and scientific world had shown to meet the wishes of the opponents of vivisection." The names were doubtless wanted for purposes akin to that which the clique represented by Mr. MUNDELLA are seeking to effect by the publication of select passages from the evidence given before the Commission. It is reassuring, though a little startling perhaps, to find a Cabinet Minister exhibiting concern, and acting with consideration, for the interests of a profession which it is the fashion of official life to ignore or neglect.

The satisfaction, however, with which we regard another of the Home Secretary's proceedings is based on broader views. Mr. CROSS has taken a bold and sensible step in relation to the important question of sanity and responsibility, in the case of the convict TREADAWAY. It is always disagreeable, and we doubt whether anything short of grave danger of misadventure can render it expedient, for a medical journal to interpose between the sentence of a court of justice and its execution. We felt bound to take this step on a recent occasion, and it is our happiness to have had proof that the remonstrance addressed to the Secretary of State was not disregarded. The interference of individual physicians by letters, duly signed and addressed, to the lay newspapers, is, we think, a grave indiscretion, which reflects, perhaps, more directly on the perception of the writers than upon their motives. It is not given to all men to see themselves or their conduct as others see them, and for the sake of sensitive natures, which must recoil from the most distant seeming of a desire for publicity, it is well the perceptive faculty is not in all cases especially acute. This hint we have felt it expedient to throw out in passing; but our immediate concern is with the course taken by the Home Secretary.

The question of sanity, involving the practical issue whether an alleged criminal can be held responsible for the crime with which he is about to be charged, ought, in the interests of justice, to be determined before the accused is arraigned. It would be convenient to take the inquiry immediately after the finding of a true bill by the grand jury. A medical board, officially controlled by a lawyer, might be constituted, as we have repeatedly suggested in detail, for this purpose, and would be available for others arising in process of law. Meanwhile the course taken by the Home Office in dealing with the case of the convict TREADAWAY is remarkable for its wisdom and efficiency. The President of the College of Physicians, Dr. RISDON BENNETT, and one of the Lord Chancellor's Visitors of Lunatics, Dr. CRICHTON BROWNE, have been appointed to examine and report upon the mental condition of the condemned criminal. The selection is admirable as regards the men charged with this delicate task, and wise as a measure of policy towards the profession. The President of the College of Physicians may be accepted as the representative of general medicine; the Lord Chancellor's Visitors of Lunatics are men who have earned distinction in the specialty of what is called "mental disease," and are now invested with an official character. We think such men, and such only, should be consulted by the Executive as to the issue of a judicial decree. It would be advantageous to the cause of science, and to the profession, if it were possible to secure the counsel of official persons always on subjects of medical opinion, and the practice of retaining medical witnesses to give evidence for or against particular interests could be finally abandoned. The prevailing method is faulty and mischievous; it discredits a scientific judgment, and, while appearing to open a way for personal advancement, casts a shadow of suspicion on the independence and truth-seeking accuracy of the profession as a whole.

Precautions against misconception are, in the highest degree, indispensable to the prestige of medicine in the branch of lunacy. Wholly irrespective, therefore, of the satisfaction with which we regard the individual physicians upon whom the choice of the Home Office has lighted, we think the course pursued will give the widest confidence. It is important that lunacy should be distinctly recognised as a part of general medicine; it has too long and too commonly been treated as a specialty by itself. The principle of unity has, in this instance, been asserted by the association, in the inquiry instituted, of a representative general physician with a specialist of high repute. It was important to affirm the expediency of appointing official advisers in aid of justice. This has been, in large measure—perhaps as far as was possible under existing circumstances—accomplished by the choice of men clothed with an official character, and, in one instance at least, restricted from private practice, consequently, also, from appearance in a court of justice as the partisan of a special interest. The course pursued is not without precedent, but it is a timely and judicious assertion of a sound principle, and indicates administrative wisdom which the profession will appreciate and the public cannot fail to respect.

IN no department of medical science has modern observation—assisted by the improved methods of research on which so much scientific ingenuity has been expended—been productive of greater advance in our knowledge than the conditions of the circulation, healthy and morbid. The practical gain which has accrued to the physician from this increase in our knowledge is less than might have been anticipated, but it is considerable. The volume of ZIEMSSEN'S Cyclopædia which is devoted to diseases of the heart and great vessels will therefore be welcomed with more than usual

interest as an account of the latest positions reached by the conjoint efforts of physiological and clinical work. But this interest is in some degree doomed to disappointment. Most of the articles which it contains present able and useful clinical expositions of the several diseases of which they treat, but the reader will seek in vain for any guide in the exploration of the by-paths of the subjects; while, in many instances, the information is not so full, nor is it so exact, as that which is available to the English reader in the practical treatises which have long been the standard text-books in this country.

The general description of the symptoms of heart disease, and also that of diseases of the endocardium, have been entrusted to Professor ROSENSTEIN, whose work in connexion with diseases of the kidney has already made his name one of authority in clinical medicine. These two articles are among the best in the volume. On many points, however, he is certainly not in accord with English authorities; indeed in scarcely any article in the volume does English work receive its fair share of credit, and more than one English discovery is attributed to later Continental observers.

The description of the position of the heart is at once an illustration of this, and of the fallacy which may attend an attempt to obtain precision at the expense of other conditions. It is easy to mistake precision for accuracy. PIROGOFF'S results from the examination of sections of frozen bodies are relied on as the absolute guides to the position of the movable thoracic viscera. Dr. SIBSON has conclusively shown that the results so obtained are not directly applicable to the living body. Death occurs at the end of a deep expiration, and the position of the thoracic viscera after death is higher than that they occupy during life. The valuable work of Dr. SIBSON appears to be unknown in Germany.

A point to which the reader will turn with much interest—a point which is theoretical at present, and yet likely to be of high practical importance—is the question of the mode of production of cardiac murmurs. The subject is very briefly discussed. In common with many modern writers, ROSENSTEIN rejects the old theory that murmurs depend on vibrations produced in the walls of the vessels and heart by the friction between the blood and the roughened surfaces. It is usual to base this rejection on the experimental evidence that murmurs may be produced under circumstances which exclude the idea of such friction, but ROSENSTEIN gives as the fundamental ground for rejecting this theory the experiments of NEUMANN, POISEUILLE, and others on the motion of fluids in closed vessels. These observers have shown that the extreme peripheral layer of fluid merely moistens the walls of the vessels, and must consequently be at rest. Other evidence is derived from the fact that no murmur is heard in extensive atheroma of the vascular walls, provided the atheroma is not complicated with alterations in the lumen of the vessels, and also from the fact that the maximum intensity of a murmur is not at the place at which we should have to suppose that the greatest friction occurs. ROSENSTEIN accepts the theory which ascribes the murmur to the vibrations in the blood produced by the friction between the particles of the fluid during the passage of the stream through openings of unequal lumen. This is the explanation which, as is well known, was originally furnished by Sir DOMINIC CORRIGAN. But ROSENSTEIN rejects that part of CORRIGAN'S theory to which CHAUVEAU has given an attractive preciseness. CORRIGAN believed that the essential condition for the production of a murmur was the passage of a narrow jet from the constricted portion of a vessel through the fluid which occupies the wider portion—that it was due, in fact, to what modern writers following SAVART have termed a "veine fluide." CHAUVEAU attempted to apply this theory to the explanation of all cardiac murmurs, but the accuracy of this wider application may well be doubted, and the experiments of WEBER, especially, show that rapidity of current is a very important element in the mechanism by which murmurs are produced, and that if a current be strong enough a murmur may be produced in a glass tube of uniform diameter.

The variety of endocardial inflammation which has been in this country chiefly known as "acute ulcerative endocarditis" occupies the position of a very distinct and definite malady in modern pathology, and is described by ROSENSTEIN under EBERTH'S name of "acute diphtheritic endocarditis." Special interest has been given to the disease by the discovery, which appears to be now well substantiated, of the part played by minute fungoid organisms in its pathological processes, a discovery which induced WINGE to give the disease the name of "mycosis endocardii." The minute organisms are similar to those found in the false membrane of diphtheria. A separable membrane has been described as existing in some cases upon the diseased valve, but it is doubtful whether the resemblance of the pathological processes is sufficiently close to justify the employment of a name which, according to our use of it, would involve a very definite theory. The more common form of endocarditis, in which warty vegetations are found on the valves, is termed "verrucose"—an awkward term; but the description of the etiology of the former disease shows the difficulty which necessarily arises in drawing a sharp distinction between morbid states which arise under similar conditions, and are attended by consequences ranging over the same area of anatomical ground and having many coarse features in common.

The reader will search in vain for any addition to our knowledge, theoretical or practical, in the chapters on diseases of the walls of the heart, which have been furnished by SCHROETTER. Nowhere do the articles rise above the needs of the ordinary medical student, and many important questions concerning the causes and effects of morbid states of the walls of the heart receive no more than a passing allusion, and some of them are not even alluded to. The observations of BRIGHT and JOHNSON, of GULL and SUTTON, on the relations between hypertrophy of the heart and renal disease, are not mentioned; the views of the latter observers receive only brief discussion in a subsequent article on diseases of the arteries.

The most instructive section of LEBERT'S article on congenital diseases of the heart is that in which he discusses the relation between stenosis of the pulmonary artery and tuberculosis. The early impression that cyanosis was antagonistic to tuberculosis has been amply disproved, and has, indeed, been replaced by a theory which is practically, though not exactly, the converse—viz., that tuberculosis is very common

in these cases of congenital disease of the heart. The connexion is not with cyanosis, but, as LEBERT shows, with stenosis of the pulmonary artery. In this condition tubercular phthisis is, he maintains, more frequent than in any other morbid state, except only the later stages of diabetes. This is traced to the imperfect and irregular supply of blood to the lungs, which are themselves also in most cases imperfectly developed. The blood reaches the lung mainly through the bronchial arteries, and has a more arterial character than in health, although this may be to some extent neutralised by the mixture of the blood in the two sides of the heart, which is constant in these cases. LEBERT points out that this is precisely the opposite condition to that which is met with in disease of the left side of the heart, in which the lungs are overloaded with venous blood, and tubercular disease is extremely rare. The influence of the pulmonary stenosis on the production of this condition is shown further by the circumstance that inherited taint is rarely met with in these cases, and seems to play but a very small part in the production of the tuberculosis. The changes in the lungs are considerable: disseminated pneumonia and grey granulations are both found; excavation is often considerable, and the disease runs the course common in cases of destructive lobular pneumonia — marasmus, hectic, abundant expectoration, and generally frequent hæmoptysis. The hæmorrhage LEBERT associates especially with the dilatation and distension of the bronchial arteries. Not only is lung disease frequent, but general tuberculosis is not rare, the granulations being widely disseminated through the organs of the body. The disease is usually very chronic, lasting for many years, but in the end almost invariably fatal. Death rarely occurs, however, before the tenth year, and life is usually prolonged into the second decade. The other portions of LEBERT'S paper are short and condensed. The discussion of the important practical question of the diagnosis of these conditions especially is too brief to add to existing knowledge of the subject.

THE Bill before the French Legislature for imposing fines and imprisonment on foreign physicians or surgeons practising in France, unless possessed of French qualifications, is unworthy alike of a liberal country and a liberal profession, and has no justification in the circumstances of France or in the spirit of the times. But it will do good in one way. It will direct attention to the question of the mutual recognition of degrees and diplomas by different nations. This is not a new question in England. It has already been under consideration in this country, alike of its statesmen and of the members of the General Medical Council. Even the Act of 1858 was liberal in its conception compared with the French Bill of 1877. It made provision for the recognition and registration of doctors of medicine of any foreign and colonial university or college practising in the United Kingdom before the first day of October, 1858, who should produce certificates to the satisfaction of the Medical Council of having taken their degree or diploma after regular examination, or who should satisfy the Council that there was sufficient reason for admitting them; in other words, there was no backward operation of the Act in the way of disqualifying foreigners in actual practice, which it is gravely said is the case with the French Bill. Then the Act of 1858 was more liberal to foreigners than the French Bill, as we pointed out last week, in the sense that it only did not recognise the holders of foreign degrees and diplomas (barring the case of those in actual practice), whereas the French measure proposes actually to punish them with fines and imprisonment. It is open, even under the present law of England, to foreigners to practise. And if their diplomas are respectable they will have neither let nor hindrance from any corporate body or individual member of the profession. So much for the Act of 1858. But our English readers will remember that in 1870 Mr. GLADSTONE'S Government brought in a Bill to amend the Medical Act, and this Bill, brought in by Lord DE GREY, went much further in its recognition of foreign diplomas, degrees, and titles than the Act of 1858. It empowered the Medical Council to place such diplomas and degrees on the Medical Register, when it should appear that they had been granted in respect of a higher degree of knowledge in medicine and surgery than is required for obtaining a licence under the English Act. Moreover the Council by this Bill was empowered to direct the registration of any person of whose eminent professional acquirements and character it should be satisfied, and who had been practising for more than ten years in any British possession or foreign state. Not only were these clauses in the Bill, as drawn by the Lord President, but they were accepted and approved by the General Medical Council at a meeting of that body specially called for the consideration of the Bill. The Bill did not become law, but the opposition to it was in no way offered to the clauses providing for the recognition of foreign degrees and diplomas.

We have thus shown that the question of recognising foreign degrees is not new to us, and that it has been treated in no illiberal spirit by the Government, nor even by the Medical Council. We are quite ready again to entertain the question, and are rather glad than otherwise to see it raised in a decided way by the French Bill. It is the more likely to command general attention and to compel discussion. Legislatures and governments take sadly too little interest in these questions; and even medical faculties and councils are apt to evade them, or treat them narrowly, unless compelled to a discussion of them in the light of great public principles. It is difficult to get at the mind of the profession on this question, but one bit of evidence on this point happens to be before us. It is enough to show that the run of English practitioners are willing to recognise foreign graduates. The East London Medical Defence Association has draughted a Bill for the Amendment of the Medical Act which, *inter alia*, provides for the registration of doctors of medicine, graduates of any foreign or colonial university, whose examination has been proved to the satisfaction of the Council to be equal to that required for gaining the membership of the College of Physicians of London.

We have said enough to show that no such proposal as that now before the French Legislature could be proposed in England. We admit frankly that the State in each country has a right—nay, is bound—to satisfy itself of the competency of any persons who seek to practise medicine in it. The exact way in which this should be done is a fair matter for discussion — whether the Government, or the

Medical Faculty, or the Medical Council, should sanction registration. These are all matters for international debate and friendly discussion; but that the countries of Europe at least should courteously recognise each other's examinations within certain limits is a proposition that should not require much enforcement. That France and England should take the lead in this matter is especially obvious. For what great interests are at stake! The health-resorts of the South of France are largely dependent on English support, and will fail if that is withdrawn; and it is clear that English visitors will not go there if they cannot have English doctors to attend them. French doctors will gain little and French interests will suffer greatly. But English invalids will be the great sufferers, and we cannot believe that this fact will be always disregarded by the promoters of this Bill. Another suggestion has been made, that a clinical examination should be established for practitioners desirous of practising in France. This is a far more reasonable proposal than to subject qualified practitioners, who have already shown their knowledge, to a troublesome examination in the French language in subjects like anatomy. But our strong opinion is in favour of a generous admission by each country of the better qualifications of other countries; and, for very obvious reasons, such a recognition between France and England would be seemly, and ought to be immediately arranged. If medical questions were not so inadequntely considered in this country, this one would have been settled long ago.

THE three meetings of the Pathological Society which have been devoted to the subject of Visceral Syphilis have shown how much there is yet to be learnt on this important subject, and have also unquestionably added not a few facts of interest and value to our knowledge. The discussion, or rather exhibition, which is just concluded must be regarded as the outgrowth of the debate last year on the same subject, which was so ably opened by Mr. HUTCHINSON. It was evident from the course of that discussion that there were a number of points on which our acquaintance with the life-history of syphilitic new growths was defective, and that certain questions which must have an important bearing on the general pathology of syphilis had been almost, if not entirely, overlooked by pathologists. We owe it to the acumen of Mr. HUTCHINSON in pointing out some of these gaps in our knowledge, especially as to the occurrence of gummata in the secondary period, and the presence of lesions of the nervous system in congenital syphilis, that attention has been directed to these and other points, and that some valuable observations have already been made. Nor must we omit to award to the same gentleman his meed of praise for drawing attention during the present discussion to other unexplored regions, especially to the changes produced by syphilis in the venous system, the vaso-motor ganglia, and the choroid—points well worthy of the attention both of clinicians and patholgists. Here, too, we may mention the important observations of Dr. BARLOW on enlargement of the spleen and liver in congenital syphilis, which were confirmed by Mr. HUTCHINSON'S experience. Dr. BARLOW stated that Dr. GEE was the first to draw attention to this point, in a paper read before the Royal Medical and Chirurgical Society, a paper which, as we do not find it in the "Transactions" of that Society, we presume the Council did not consider of sufficient importance to warrant its publication!

It is evident that a very wide field for observation on the subject of visceral syphilis yet lies open; that, notwithstanding the attention which has been paid to it, and the large number of observations on cases of disease in various organs, the scientific history of syphilis in its entirety is yet to be written. What is the precise relation of gummata to the syphilitic poison? at what period do they commence? what are the laws which govern their evolution and decay? and by what criteria may they be distinguished from other new growths and chronic inflammatory products? These are questions on which opinion is, to say the least, divided. Again, the relations of syphilis to the various organs, what changes are unquestionably of specific origin, what is their starting-point and mode of invasion, and how far they are of symmetrical occurrence, are not as yet clearly established.

The various specimens which have been exhibited will, if they do no more, serve as material towards the solution of these problems. The large number of the specimens would prevent any consideration of them in detail; they have served their purpose in bringing under the eyes of the Society and the profession the more common and evident forms of syphilitic disease. But we may briefly refer to one or two of the more novel and important points raised, especially with reference to disease of the cerebral arteries and of the lungs, two of the points which were prominently brought under notice. It is evident from the number of cases brought forward, and from the references made to statistics, that the arterial system, especially of the brain, is very frequently affected in tertiary syphilis, and that the consequent changes in the brain-tissue play a very important part in the clinical history of the disorder, and are not unfrequently the immediate cause of the fatal issue. But a good deal of difference of opinion seemed to exist as to the precise nature of the arterial changes. It was generally allowed that the external characters were in the majority of cases similar, and consisted in a considerable thickening of the vessels by infiltration of their walls with new growth, this thickening leading to narrowing of the channel of the vessel, and in some cases to complete obliteration, in others to thrombosis and consequent obstruction; that this disease might be widely distributed, affecting both the larger and smaller arteries, or only limited tracts, and that it might be associated with distinct gummata in the membranes or brain, or be independent of them: and that in its naked-eye characters it differed essentially from ordinary atheroma and other common degenerative changes. Moreover, the important observation of Dr. BARLOW showed that a lesion of precisely similar character might occur in infantile syphilis. But the main point in dispute was as to the precise part of the arterial wall involved—whether the outer or the inner coat was chiefly affected. This divergence of opinion appeared to correspond with differences in the specimens exhibited, which proved conclusively that the condition varied in different vessels and even in different parts of the same vessel. All were agreed as to the presence of

infiltration of the outer coat in greater or less degree, and that this might constitute the sole morbid change. It must, however, be observed that since this might occur by direct continuity of infiltration from the pia mater—and it appears to us to have done so in some cases,—this alone can scarcely be said to constitute a peculiarly arterial disease. On the changes in the inner coat there was great diversity of opinion. That changes of a peculiar character do occur in the inner coat in some cases was clearly proved by two specimens exhibited by Dr. GREENFIELD, who dwelt especially on their importance, and also by the specimens of Dr. BUZZARD and Dr. DAVIDSON. It would be out of place for us to enter here into the minute points involved in this question. Dr. GREENFIELD especially insisted upon the characters of the growth as corresponding with other gummatous infiltration, on its vascularity and the mode of its origin and progressive change, as distinguishing this affection of the inner coat from any of the ordinary results of chronic endarteritis. If, as he believes, this growth in the inner coat may precede or occur independently of thickening of the outer coat, the fact will afford a valuable addition to our knowledge of syphilis. We cannot, however, enter more fully into the various views entertained as to the relations of these changes, which may well form a subject for future investigation. It is difficult to believe that this or similar changes can be limited to the cerebral arteries, if they are due to a general disease. In tracing out the course of development and retrogression of gummata in other organs, Dr. GREENFIELD stated that he had observed similar changes in the inner coat of smaller vessels leading to degeneration of the new growth, and he believed that this constituted one of the important points of differentiation of syphilitic from other chronic inflammatory growths, and might be one cause of the peculiar naked-eye characters of gummata. The subject is certainly one which deserves investigation, but it must be borne in mind that we know as yet but little of the minute changes in the smaller vessels in chronic interstitial inflammations, and these must be also examined before we can decide how far these changes are peculiar to syphilis.

We have already referred to the case of syphilitic meningitis in an infant exhibited by Dr. BARLOW, and we would also draw attention to the specimen shown by Dr. GOWERS of syphiloma of the brain in a boy, twelve years of age, the subject of congenital syphilis. Other specimens shown by Dr. GOWERS illustrated well the growth of syphilitic gummata of the nervous centres and their mode of infiltration.

We must reserve our comments on the subject of syphilitic disease of the lung for another article.

Annotations.

"Ne quid nimis."

HIGH HEELS.

THE unnatural character impressed on the gait of women by the prevalent fashion of high and narrow heels to the boots is the expression of a perversion of the natural relation of the articulations and muscular action such as cannot but result in serious and permanent damage. The character of the injury which they produce, and the symptoms by which it is expressed, are well described by Dr. Onimus in a recent communication to the Société de Médecine of Paris, which has been published in *L'Union Médicale*. The heel of the boots is not only high, but narrow and inclined forwards, so that the distance between the heel and the point of the foot is lessened, and the foot appears smaller than it really is. This, absurd as it is, appears to be their chief recommendation in the eyes of their wearers. The effect of the oblique position of the foot is, of course, to remove the weight of the body from its natural support—the prominence of the os calcis,—and project it forwards on to the plantar arch. Hence one of the most frequent symptoms of which the wearers of these shoes complain is an acute pain in the sole of the foot, in front of and below the external malleolus. There is often considerable tenderness as well as pain, possibly in consequence of an inflammation of the calcaneo-cuboid articulation. The forced depression of the anterior part of the foot determines a painful displacement of the articular surfaces. The toes, instead of the heel, first touch the ground, and the walk is clumsy and heavy, instead of light and undulating. The toes become permanently flexed and pressed together, partly in consequence of the narrowness of the front part of the boot, partly in consequence of the over-action of the flexors of the toes, due to the increased pressure on the toes, no doubt partly also to the habitual over-extension of the metatarso-phalangeal articulations, and to the irritation and contraction of the short flexor of the toes in the sole of the foot.

Other muscles are also involved in the disturbance. Those of the calf are commonly in a state of painful contraction. In consequence of the height of the heel, the body has a tendency forwards, and the soleus and gastrocnemius have to overact to correct this tendency. The peroneus longus is also affected in a very marked and uniform manner, and the pains persist longer in it than in the other muscles. These muscular pains were the symptom which first drew attention to the effect of the boots. Even the muscles of the thigh may suffer, and the rectus and adductors may be the seat of some contraction. In cases of nervous temperaments the pain and irritation have produced general nervous symptoms of hysterical character. The mode of carriage of the body is influenced by the position of the feet. The centre of gravity must be kept in the line of the base of support, and hence the pelvis is tilted forwards, and anteflexion of the uterus is easily produced, and is, according to Dr. Onimus, actually present in a considerable proportion of the wearers of the "*bottines Louis Quinze*," as they are termed, in consequence of their extensive adoption in the last century. Then, as now, the fashion emanated from Paris, and then, as now, at least one stringent protest was made against the form of shoe, and its consequences on the feet of the wearer were pointed out. This was on 1781, by Petrus Camper, Professor of Medicine at La Haye. He insisted strongly on the articular deformities almost in the same words as those employed by Dr. Onimus, but did not associate these deformities with the muscular pains.

SMALL-POX FROM THE LAUNDRY.

A CASE occurred last week in Broadwall, Southwark, which illustrates, at once, how small-pox is spread, and also the suffering which may be entailed by attempting to check its propagation. In one of the low-class tenements close to Stamford-street, a widow and her daughter earn a miserable subsistence by washing linen for several families residing in the neighbourhood. On Friday last the Poor-law medical officer of St. Saviour's received instructions to call at this house and found the daughter suffering from small-pox, the disease having already reached an advanced stage. But for this opportune visit the linen washed on

the premises would have been despatched to its various owners, thus exposing them to the contagion. Of course, the medical officer gave orders that the linen should not be sent back, and his directions were obeyed; but it was a mere accident that this case was discovered in time to prevent extensive mischief. On the following morning, the patient was removed to the hospital, the clothes all taken away and disinfected, and the house fumigated, &c. So far so good. But there is another and more complicated phase of the question which must also be dealt with. There is the widow's side of the story, which deserves to be heard; and, when we called at the house in question, she insisted with tears in her eyes that she was now ruined. After disinfection she was obliged to rewash all the linen; this caused a week's delay, an extra week's work and the loss of a week's pay. Her customers, finding that their linen did not come home at the ordinary time, had ascertained the whole details of the case. She felt certain that she would never regain their confidence, and she had already been compelled to apply for outdoor relief. When we objected that this trouble might in part have been obviated had she caused her daughter to be removed at once to the hospital, the woman replied that she was ignorant of the nature of the disease, knew nothing concerning the complaint, and could not be expected to detect its symptoms. This plausible argument, doubtless correct in many other cases, was not quite accurate in this instance. She had been warned on the Wednesday that the disease was in all probability small-pox, but it is easy to understand that she should have hesitated for a day or so, hoping that the complaint might prove less serious. When, however, all doubts had been cleared the woman maintains she no longer objected to the necessary removal of the patient and the disinfection of the premises, though aware that this would entail the loss of her only means of subsistence. Of course it is better, as in this case, to sacrifice the interests of an individual to ensure the welfare of the community. It is appalling to reflect that our linen, apparently clean and fresh from the laundry, may be in reality reeking with the germs of a loathsome disease; but at the same time we must expect women in the position of the laundress in Broadwall to conceal any cause of infection that may exist in their homes, if disclosure implies the ruin of their business.

ECZEMA OF THE NIPPLE AND MAMMARY CANCER.

THE interesting discussion at the Royal Medical and Chirurgical Society, on the 23rd ult., arising out of Mr. Butlin's paper upon the Minute Anatomy of two cases of Carcinoma of the Breast preceded by Eczema of the Nipple, is deserving of more than passing notice. The clinical fact observed by Sir James Paget of the frequent, if not invariable, development of mammary cancer in cases of long-standing intractable eczematous affection of the nipple and areola, has been amply supplemented by Mr. Butlin's histological research. About a year ago that gentleman contributed a paper at the Royal Medical and Chirurgical Society, in which he describes the changes occurring in two breasts, the areolæ of which had been long the seat of eczema. To the naked eye these breasts presented the characters of cancer, but Mr. Butlin found histologically nothing but appearances of chronic inflammation of the mammary acini and gland-ducts. In the paper just read, the mammary changes had reached their consummation, and well-developed scirrhous cancer, to Mr. Butlin's mind obviously developed from changes in the gland similar to those he described last year, was plainly discernible. The link in the chain is thus supplied, and the clinical fact noted by Sir James Paget is satisfactorily confirmed. In the discussion that followed, Mr. Henry Morris mentioned that out of 215 examples of mammary cancer he had seen, not one was associated, either at the time or previously, with eczema of the nipple, and of seven cases of eczema of the nipple none were the subjects of cancer; but it is obvious that no deductions can be drawn from these figures, except that the occurrence of eczema of the nipple, followed by cancer, is rare. Of the fact of the occurrence we have Sir James Paget's experience, and of the possible transition from a state of chronic glandular "inflammation" into one of carcinoma we have Mr. Butlin's painstaking histological research. The discussion, however, embraced wider questions than simply the subject of the paper, although that itself seems to afford very strong confirmation to the general doctrine of the local origin of cancer, as advocated by the late Mr. De Morgan. It may be hardly fair to construe Sir James Paget's remarks in this way, for although he stated that such cases were examples of a general law of chronic irritative action in a part leading to perverted nutrition and the formation of cancer, he doubtless meant in subjects disposed to the development of cancer on other grounds than that of age alone.

The epithelial origin of cancer was also discussed. Dr. Thin's criticism as to the fact of proliferation of formed elements and tissues, such as epithelium, was not without a certain cogency, and cannot readily be disposed of. All that can be said, as Mr. Butlin pointed out and as Mr. Hulke ably illustrated, is that appearances are in favour of such proliferation. Dr. Thin would have us believe that the cancer-cell, epithelial as it is in type, is yet developed from a leucocyte, and he claims to have traced transitional forms between the constituent elements of the zone of "granulation cells" around the margin of any growing cancer and the epithelioid cells of the latter. It is evident that histology has not yet done its work; much remains to be determined, but the way in which it helps the clinical observer was fully shown at this meeting.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE question of prolonging the term of office of the President of this College by an additional year has lately been placed prominently before the profession in Dublin, and we learn that steps have been taken for a general meeting of the Fellows to be held in a week or so, when the whole matter will be fully discussed. It will be acknowledged that the leaders of the profession are those who should alone be eligible for the highest office the College of Surgeons can offer—its presidency; and it is unlikely that, in a city like Dublin, men really representative of the profession can be so numerous as to supply the demand under the present system. We understand that the President of the College of Physicians is elected for five years, and, so far as we can learn, the method has worked harmoniously. Considerable opposition to the proposed change may be expected at the meeting shortly to be held, but we have little doubt that it will ultimately be adopted.

THE NEW LAW OF ELECTION AT ST. GEORGE'S.

WE cannot forbear a word of satisfaction at the change in the mode of election at St. George's Hospital. This change has reference to offices only which are primarily hospital offices. The elections to the special departments, the officers of which are primarily teachers, remain with the Medical School Committee. But election to the hospital offices will henceforth be made by a committee instead of by the general body of governors, and canvassing will be prohibited. The constitution of this committee will be seen by reference to last week's LANCET, p. 262. The Committee

will contain the consulting physicians and surgeons, the four physicians and the four surgeons, and twenty-four governors elected annually. The medical officers will be in a decided minority in this committee, but we have little doubt that they will have a great and just influence; and we shall look confidently to the elections at St. George's to justify a mode of election which we have long advocated, and which we expect to be at once more efficient and less costly than the old mode. It is gratifying to know that the new law was proposed by some of the lay governors, and, after slight amendments to meet the objections of the staff, carried by acclamation.

SEAMEN'S HOSPITAL, GREENWICH.

THE fifty-sixth anniversary of this valuable Society was held last week at the Cannon-street Hotel, the Duke of Northumberland in the chair. The meeting was most enthusiastic throughout. Mr. S. Cave, M.P., in moving the adoption of the report, alluded to the great national benefit the hospital had been by enabling the medical profession to throw light on the treatment and pathology of scurvy and other special diseases. This allusion was a graceful and well-deserved recognition of the labours of Busk, Budd, and Leach on behalf of the British sailor. We regret that the public are still imbued with the idea that since the hospital has been removed on shore it has been endowed by Government, and has no need of help. This idea affects the subscription list most injuriously, and had it not been for the strenuous efforts made by Mr. H. C. Burdett, the secretary, and the frequent appeals made by him through the press, the hospital would have been seriously embarrassed. The Committee intend taking steps to make the claim of the hospital as well known as it was in the days of the old *Dreadnought*. We would suggest that the best form of doing so would be a floating receiving house in the Thames. We understand that many of the patients applying for relief at the hospital at Greenwich are first carried up the river by their vessel to the docks, and then brought back and across the river to the hospital, a process involving considerable suffering and exhaustion to those affected by acute disease. Formerly ships passing up the river left their sick at the *Dreadnought*. The establishment, therefore, of a receiving vessel in the Thames might not only prove a good advertisement, but would also be a great convenience to the sick sailor.

SIR H. THOMPSON AT EXETER HALL.

THE brief summaries given in the daily papers of Sir Henry Thompson's speech at the Total Abstinence meeting at Exeter Hall on the 15th inst. hardly did justice to his remarks, which were couched in a more temperate tone than commonly prevails at such gatherings. While strongly urging the inutility of alcohol to healthy men and women, he condemned strongly the attitude of those who would withhold alcohol from the treatment of disease, declaring that, with all assurance of its injurious qualities in health, he was equally sure that in disease he had saved life with it. He urged that the reason why alcohol could not now be taken with the impunity with which our forefathers consumed it lay in the different lives which were led now and which were led formerly, and the extra strain on the nervous system rendered alcohol more injurious. Another source of fallacy was that we heard now only of the survivors of those days, and not of those whom alcohol killed off in their attempt to follow the example of their elders. By implication, it was hinted that there were people now who could take alcohol with impunity, although there were many more who could not.

THE LATE SIR WILLIAM FERGUSSON.

THE remains of Sir William Fergusson were interred on the 16th inst. in the family burying-ground at West Linton, Peeblesshire. The pall bearers were Sir James Fergusson, Lieutenant Charles Hamilton Fergusson, sons of the deceased; Mr. Colin C. Hodge, Mr. William Scott, Mr. W. Forbes, of Medwyn; Mr. J. O. Mackenzie, of Dolphinton; Mr. John Blackwood, Edinburgh; and Surgeon-Major Snell. Among those present were Captain Harris, London; Professors Balfour and Spence, Edinburgh; Mr. Gadsden, London; Mr. James Murray, of Callands; Mr. James Mackintosh, of Lamancha; Mr. W. Blackwood, Peebles; Mr. Beresford, Macbiehill; Major Kennedy, of Romano; Mr. H. Hope, of Bordlands; and Dr. Walker, Edinburgh. On the top of the coffin were wreaths of immortelles, camelias, ferns, and rosemary, contributed by General Pringle Taylor, Lieutenant-General Bisset, Mrs. Charles Kean, Mr. William Rose, Mrs. Pearson, Mrs. Barry, and Mr. George Ragett. Each wreath had a card attached to it conveying expressions of sympathy with the relatives of the deceased.

THE CORONER SYSTEM IN AMERICA.

A STRENUOUS attempt is being made in America to effect a reform in the coroner system. The question was lately discussed by the Health Department of the Social Science Association, when there was an unanimity of opinion exhibited in favour of remodeling the entire system by which the office of coroner is conferred and its tenure determined. The main objections urged against the present *régime* were the ease with which appointments were obtained, the difficulty of getting an official once appointed removed, the fact that there was no law limiting their number, and the circumstance that if the six jurors who are summoned do not appear, the coroner can immediately fill up their places from the bystanders, and thus is able, as the *Boston Medical and Surgical Journal* puts it, "with a very little skill to get precisely the jury he wants." The same journal stigmatises the present system as rotten, and the character of some who hold the office of coroner as "worse than doubtful"; while the juries are termed "as a rule, mere figure-heads, and are liable to be worse"; and then goes on to say that "it is not professional dignity alone that demands a reform; it is called for in the name of public decency, and for the protection of the innocent and helpless." We may here observe that Boston has a plethora of coroners, there being no less than forty-three gentlemen claiming the title, and that last year there were held 110 inquests, and 423 "views," at a cost to the city of nearly eleven thousand dollars.

THE COURT SURGEONS.

THE Court surgical appointments, which have been announced this week, have, it is hardly necessary to say, been received by the profession with warm satisfaction. The Serjeant-Surgeoncy, vacant by the death of Sir William Fergusson, naturally falls to Sir James Paget, who has for some time held the appointment of Serjeant-Surgeon Extraordinary—a post without the emolument, but with hardly less honour than that to which he succeeds. The post of Serjeant-Surgeon Extraordinary is one which was created originally to reward special services to Her Majesty. It is not one of the customary appointments, but has been occasionally revived for the same purpose as that for which it was created. Its continuation on this occasion to Mr. Prescott Hewett is an unusual honour, and a graceful recognition by Her Majesty of past services and of the distinguished professional position which Mr. Hewett has so

long held. Not less welcome to the profession is the appointment of Mr. Erichsen as Surgeon-Extraordinary, as a recognition of his long and distinguished career as a practical and scientific surgeon.

COURSE AND TERMINATION OF THE NERVES OF THE OVARY.

DR. ELISCHER, from investigations made in the laboratory for embryological research of Prof. Michalkovics, in the University of Buda-Pesth, has satisfied himself that the nerves of the ovary in mammals enter into the substance of the organ in the form of medullated fibres accompanying the looped and tortuous vessels that pass to the hilus, and run also in the proper ligament of the ovary. Some of the fasciculi branch dichotomously till they reach the follicular layer of the periphery, where they lose their medullary sheath, and form loops around the follicles. Others form a coarse plexus around the vessels. The more mature the follicle—that is to say, the thicker the membrana granulosa—by so much the more distinctly can a still somewhat coarse plexus be seen of tolerably thick nerve-fibres in the substance of the follicular investment, and from this plexus, another plexus, composed of more delicate fibres, forming a more elongated network, with numerous knots and varicosities, can be seen to arise, which is applied to the outer layer of the membrana granulosa. Some of the branches, he thinks, penetrate the cells of the membrana granulosa, and run up to the nucleus. He recommends the ovary of the sheep as the object best adapted for investigation.

HOSPITAL NAMES.

OUR attention has been called to the way in which certain successful institutions suffer from the imitation of their names by less successful rivals. One hospital which has suffered in this way more than others, because it had an unusual degree of success, is the institution in Queen-square, which is called the "National Hospital for Paralysis, Epilepsy, and other Diseases of the Nervous System." One institution has lately called itself the "National Hospital for Diseases of the Heart, Epilepsy, and Paralysis." A smaller institution for the same class of diseases, which was started as the "Infirmary for Epilepsy and Paralysis," and afterwards changed its name to the convenient and distinguishing title of the "Hospital for Diseases of the Nervous System," is now advertising as the "Hospital for Paralysis, Epilepsy, and other Diseases of the Nervous System." As the word "National" is, in medical writing especially, as our readers have probably observed, frequently omitted in speaking of the Queen-square Hospital, this becomes in effect a very close imitation of the title—a point of which we think the medical officers of the institution should take cognisance.

RECRUITING.

THE report of Major-General Whitmore, Inspector General of Recruiting, just issued, contains some interesting facts bearing upon the subject of army recruiting for the past year.

"The number of recruits raised in 1876 has been exceptionally large, and amounted to 29,370—a larger number than had been obtained since 1858. The recruiting for the army appears to have received a very considerable impetus in the last few months, attributable, doubtless, in a measure, to decreased employment in civil life, in consequence of the depressed state of trade; but it is reasonable to believe that there are other causes which have contributed to increase the number of men who have offered themselves for enlistment, and that the most noteworthy of these is to be found in the improved condition of the soldier, and the advantages which he derives from recent legislation in his behalf. The increase of pay to the non-commissioned officer, and the right to deferred pay given to every soldier by the Royal Warrant of April 1876, and the improved conditions as to pensions by the Royal Warrant of 6th September 1876, are, doubtless, taken into account by those who are disposed to enter the army, and will tend, it is hoped, to induce a better class of men to join the ranks. The reduction of the standard of height by half an inch, to 5 ft. 4½ in., has also helped to increase the number of men who have enlisted; and, notwithstanding this reduction, I may observe that the medical reports from the various districts, on the recruits enlisted during the year, are, on the whole, very satisfactory. Comparatively few men of the lowest height have been rejected on the score of physical deficiency, while reports have been received that these young men, after a short time, have grown and filled out to a considerable degree, and promise to become eligible soldiers."

TREATMENT OF PHAGEDÆNIC ULCERS.

WEISFLOG, in a recent paper (Virchow's *Archiv*, B. 66), states that the pain of phagedænic ulcers ceases almost immediately if the patient is immersed in a "faradising bath." One of the electrodes is connected with the bottom of the bath, and as soon as the wound is submerged in the warm water the patient touches the other electrode, which is covered with sponge, with the tip of one finger, gradually bringing the others into contact with the sponge, according to the sensations he experiences in the ulcer. The effects are less marked and less beneficial if the ulcer is out of water. For the purification of the wound he employs a weak ointment of nitrate of mercuric oxide (1 to 50). For the relief of the dolores osteocopi Weisflog recommends the use of subcutaneous injections of solutions of the nitrate, which are much less painful than those of corrosive sublimate, and never cause abscesses; whilst much larger quantities of mercury can be introduced into the system without causing salivation.

"REPEATED MARRIAGES AND LONG LIFE."

THE *Insurance Gazette*, a periodical very great upon longevity in general and wonderful cases in particular, produces a paragraph with this heading, which seeks to prove that it is good, not only to marry, but to repeat the operation as often as possible (we presume as often as is legitimately possible). A Frenchman died at Bordeaux in 1772, at the age of 101 years, having been married seventeen times. A Scotchwoman died in 1765, at the age of 106, having been the relict of thirteen husbands. It is asserted in the same paragraph that "bachelors and maids rarely attain extreme old age, while great longevity is often observed in people who have been married, not much, but many times." We pause for a definition of "not much."

THE VACANT CHAIR AT KING'S COLLEGE.

As the question of appointing a successor to the chair of Clinical Surgery in King's College has not yet been brought before the Council of the College, any rumours regarding it must of course be considered premature.

GRATUITOUS MEDICAL ADVICE IN LIVERPOOL.

IN accordance with a resolution adopted by the Liverpool Medical Institution, to the effect "that the members of this institution, being of opinion that it is desirable that a conference should be held upon the question of gratuitous medical advice as afforded in the public institutions of this town, resolve to appoint a sub-committee of their number to inquire into the subject, preliminary to a more general meeting of the profession, and that the council be requested to nominate the members of such sub-committee." The

following gentlemen have been appointed:—Drs. Carter, Oxley, Macfie Campbell, Finegan, Shearer, Bernard, Cormack, and Maunsell; Messrs. Reginald Harrison, W. Mitchell Banks, E. A. Browne, and Rushton Parker.

THE WORCESTER PROVIDENT DISPENSARY.

THE remarkable conduct of the committee of this dispensary towards Dr. Woodward has been the subject of discussion at the annual meeting. The chairman explained that they had not *dismissed* Dr. Woodward, they had only *not* re-elected him. This is a fine distinction, but the meeting supported the committee without being supplied, as far as we can see, with any justification for doing so. So much the worse for the institution. A special meeting, however, is fixed to consider an alteration of the rules, at which it is to be hoped the rules which have led to the practical dismissal of one of the most useful officers will be altered.

THE town and district of Hove, Sussex, appears to have been exceptionally healthy during the past quarter. Estimating the population at 16,000, which is probably a good deal within the mark, the death-rate was only 9 per 1000 annually, an unprecedentedly favourable return. It was frequently alleged in the autumn that scarlet fever was very prevalent in the district (and the reports are said to have done considerable injury to the place), but Dr. Kebbell states that but one death from this disease occurred in the period now dealt with, which, with another death from diphtheria, sums up the total mortality from the zymotic disorders. While expressing satisfaction at the healthy condition of Hove, as shown by Dr. Kebbell's report, the fact that much yet remains to be done in the way of sanitary improvement should be urged on the consideration of the authorities. Thus, sufficient care is not taken with regard to that useful measure the cleansing out of cisterns at stated times, while the house-drainage is by no means so perfect as it should be. With a view of keeping residents and intending visitors informed of the real state of Hove, and of counteracting panics, Dr. Kebbell suggests that a weekly record of deaths should be widely published by the Sanitary Committee.

UNDER the influence of the continued mild weather experienced during the last few weeks, the mortality-rate of most of the metropolitan districts has been below the average of former years. In Kensington, the death-rate for the five weeks ending Feb. 3rd was 6·7 per 1000 below the average; the deaths from chest diseases were comparatively few in number; and, with the exception of small-pox, the zymotic diseases were almost in abeyance. As an illustration of the healthiness of the southern portion of the parish, Dr. Orme Dudfield, medical officer of health, notifies the fact that in the week preceding the issue of his periodical report, only one death of a parishioner was registered in the Brompton registration sub-district, which contains an estimated population of over 36,000. We are glad to observe that the provisions of the Sanitary Acts Amendment Act of 1874, giving additional powers for enforcing the removal of cases of infectious disease, have been put in operation in Kensington.

RUSSIAN journals state that scarlet fever, of a malignant type, is now prevailing epidemically in Finland. The epidemic is most severe in the southern part of the grand duchy, and it is spreading westwards in the direction of St. Petersburg. At Helsingfors it has been found necessary to close temporarily the public schools. In the district surrounding this town the epidemic is not less severe than in the town. Abo is suffering severely, and the disease has broken out with violence at Novaia-Kirka.

THE annual meeting of the Governors of the London Fever Hospital was held last week. The report of Dr. Broadbent, which was read, showed that although the work of the hospital has been supplemented of late years by the erection of the Metropolitan Asylums for pauper fever patients, yet the continued need of a place of isolation for other classes of the community was shown by the admission during the past year of 730 patients, a large number being sufferers from scarlet fever. It should be generally known that eight private rooms are now set apart at this institution for persons whose friends are able to pay for their treatment and care. We much regret to learn that subscriptions have of late fallen off so much that the governors have resolved to appeal to the public for funds. There is not a more deserving hospital in the metropolis, and we would warmly urge its claims for support on the wealthy and charitable. The London Fever Hospital labours under the disadvantage that the benevolent cannot well visit its wards and see the good work performed there; it is therefore the duty of the press, medical and lay, to call attention to its usefulness and also its pressing needs.

THE medical officer of health for Calcutta, Dr. Payne, has issued another report on the existence of cholera in the city. It is tolerably well known that the disease was very rife in Calcutta during the past year, although showing some subsidence towards the final quarter. The present report is a good deal taken up with a consideration of the etiology of cholera from a general point of view. Dr. Payne says that there is nothing in seasonal influences which can explain the state of Calcutta in 1876, and is disposed to hold all conclusions on the causation of cholera provisional, and subject to further evidence. Whether the city was benefited to the limited extent shown (in the latter months of the year) by an additional supply of good water he regards as unproven, but "the facts closely coincide with such a supposition." We hope to return at greater length to this matter before long.

THE annual report of the medical officer for the Uxbridge Union Rural Sanitary Authority, Mr. C Roberts, has been issued. The most noteworthy circumstance in the past year was an epidemic of scarlatina in one of the parishes forming the union. Mr. Roberts complains that some recommendations he had made tending to the better security of public health had not been carried out, in especial a report on the defective and foul conditions of many of the wells in Southall seems to have been ignored. The ratepayers should without delay bring some pressure to bear on the board of guardians by making a representation to the Local Government Board or otherwise, which shall compel them to do their duty.

A FATAL case of scurvy occurred at the Seamen's Hospital, Greenwich, some few days ago, and it is a noteworthy fact that the vessel in which the deceased arrived brought home no less than ten cases of scurvy last year. Fatal cases of scurvy ought, in our opinion, always to form subjects for an inquest, and circumstances of the kind recorded above should be systematically and vigorously inquired into by the Board of Trade immediately after the arrival of the ship. The Board has, however, no regular machinery for such matters, and official inquiries are thus often delayed; the witnesses are scattered about the country or gone again to sea, and so a miscarriage of justice is frequently the result.

SMALL-POX presents some indications of diminishing severity in Liverpool. Last week there were 201 cases under treatment at the West Derby Workhouse Hospital, as compared with 285 in the previous week.

IN the Wigan Union a committee has been appointed to consider the expediency of the Guardians drawing up a memorial, to be circulated amongst the other boards of Lancashire, with respect to the establishment of a pauper lunatic asylum of their own. This step has been taken on the recommendation of Mr. Cane, Local Government Board Inspector, who was present at a meeting of the Wigan Guardians, convened to consider a letter which they had received, requesting them to remove from the Whittingham County Asylum, within seven days, the pauper lunatics belonging to the Union.

THE QUEEN has sent a quantity of old linen to the London Hospital, and also to the Samaritan Free Hospital for Women and Children, Lower Seymour-street. We may hope that this example will be generally followed by heads of families. Gifts of this kind are extremely useful for surgical purposes. If a systematic effort were made to collect and distribute such material at stated periods, it would largely reduce the expenditure of hospital authorities, already, in many instances, strained to the verge of crippling the activity of the charities. We throw out this hint with a full belief that a plan of this sort is feasible, and would be successful beyond expectation.

SMALL-POX is still prevalent in the neighbourhood of Chatham and Rochester. There seems likely to be a conflict between the authorities of the two towns respecting the provision of an infectious diseases hospital which the Rochester corporation desire to erect at once close to Chatham. The inhabitants of the latter town are averse to the project, and its board of guardians and board of health are taking active measures to oppose the scheme. There is an intention on both sides to appeal to the Local Government Board in the difficulty.

WE are happy to learn that Dr. Peacock, who has been suffering from a slight attack of hemiplegia, is much better, and that it is hoped he will soon be restored to health. Dr. Peacock is, we understand, under the care of his colleagues Dr. Risdon Bennett and Dr. Stephen Ward. We trust that the illness will not be sufficient to prevent a return to the professional career in which Dr. Peacock has been so distinguished and has done so much valuable work.

LECTURES on the diseases of children will be given during the month of March and the ensuing summer session, at the Hospital for Sick Children, Great Ormond-street, by the medical staff of the institution. Dr. Sturges will commence the course on Friday, March 2nd, at four o'clock, on the subject of chorea.

BY way of counteracting the evil effects of quack doctors upon seamen, the Committee of the Sailors' Home, Liverpool, have determined to establish a dispensary in connexion with it, at which seamen may obtain sound medical advice at a cheap rate.

THE Surgical Society of Paris, at a meeting held on 10th ultimo, elected Professor Longmore, of Netley, an associated member, and Mr. Bryant of London, and Professor Lister of Edinburgh, corresponding members.

THE Lord Chief Baron of Dublin is suffering from an attack of scarlatina, due, it is said, to the defective sewerage of the Court over which he presides.

THE Board of Trinity College, Dublin, has conferred the degree of M.D. on Dr. Gordon, President of the College of Physicians.

WE regret to have to announce the death of Mr. Richard G. Whitfield, who for many years was connected with St. Thomas's Hospital, first as resident apothecary, and of late years as medical secretary, a post which illness recently compelled him to resign. His loss will be regretted by old St. Thomas's men, many of whom will recall the acts of kindness with which his long career abounded.

DR. LEWIS EDWARDES, surgeon of H.M.S. *Volage*, died on the 13th ult., from cyanide of potassium, which he took in mistake for a sleeping draught. He died within ten minutes, and was buried the next day with full naval honours.

ROYAL COLLEGE OF PHYSICIANS.

A MEETING of the College was held on Wednesday afternoon, but there was nothing important on the agenda paper. A report was presented from the Censors' Board relative to the admission of foreign graduates in medicine to examination. The Censors' Board propose that they should exercise a discretionary power in admitting to examination any foreign graduate who, in their opinion, may have already passed a sufficiently good examination, and that such examination should be modified in particular cases. The College decided that the proposal, in exact terms, should be printed and circulated amongst the fellows with the summonses of the next meeting. The President said that a very interesting and important discovery had been made by Dr. Sieveking in the British Museum of the manuscript of the notes of the lectures delivered by Harvey before the College, and he sent round an autotype copy and a transcript of the last page of the particular section relating to the circulation containing words of great interest, for that particular page contained the sum and substance of Harvey's discovery of the circulation, and what appeared to Harvey to be the import of that revelation as regards the use of the circulation in relation to the nutrition and heating of the body. The thanks of the College were accorded to Dr. Sieveking.

THE SMALL-POX EPIDEMIC.

THE last weekly return of the Registrar-General showed that 95 fatal cases of small-pox were registered in twenty of the largest English towns, during the seven days ending the 17th inst., against 130 and 109 in the two preceding weeks. Of these 95 fatal cases, 72 occurred in London, 15 in Liverpool, 7 in Manchester and Salford, 1 in Birmingham, and not one in any of the fifteen other large towns. Both in London and the two largest Lancashire towns the small-pox fatality has declined in recent weeks.

In London the 72 deaths referred to small-pox in the week ending the 17th instant showed a further decline from the 103 and 90 returned in the two preceding weeks. After distributing the 32 which occurred in hospitals, it appears that 10 of the fatal cases belonged to the west, 6 to the north, 1 to the central, 26 to the east, and 29 to the south groups of registration districts. Small-pox fatality showed a further marked decline in North London, whereas it was again proportionally greatest in East London, especially in Bow and Poplar. During the first seven weeks of this year no less than 41 deaths from small-pox occurred among the residents of Bow, and 37 among those of Poplar; thus, in these two neighbouring sanitary districts 78 deaths from small-pox occurred in the seven weeks, or more than 12 per cent. of the 646 deaths registered from this disease in the whole of London during that period, although the population of Bow and Poplar is not quite equal to 4 per cent. of that of the metropolis. The local sanitary authorities of Bow and Poplar do not appear to have fully realised the exceptional fatality of small-pox in their districts. No measures appear to have been taken to authorise inspectors to ascertain the number of unvaccinated children in their districts, in order to secure their protection by vaccination.

The large proportion of fatal cases of small-pox occurring in Poplar and Bow among children under five years of age points conclusively either to the neglect of vaccination or to a large amount of inefficient vaccination. Amongst young children in these localities more than one death from small-pox have occurred in several families, and in more than one case the children have died without any medical attendance, hence the cause of death has not been certified. In such cases no inquests have been held, although there appears to be no sufficient reason why parents who so grossly neglect their children should escape prosecution because they do not belong to the sect of Peculiar People. Surely there is the strongest *prima facie* evidence of neglect when a child dies without medical attendance; hence the holding of an inquest becomes desirable.

The 72 deaths from small-pox in London included 28 which were certified as unvaccinated, and 17 certified as vaccinated; in the remaining 27 cases we are told that the medical certificates did not furnish any information as to vaccination, or contained in a few instances statements that the medical practitioner was unable to certify whether the deceased had or had not been vaccinated. The omission of this information from medical certificates relating to deaths from small-pox continues to be a source for regret, as anti-vaccinationists do not scruple to claim all not-stated cases as vaccinated cases. Of the 72 fatal cases of small-pox, 19 were of children under five years of age, 12 of whom were certified to be unvaccinated, and the others were not stated as to vaccination.

In the suburban districts around London ten deaths from small-pox were registered in the week ending 17th inst., including 3 in West Ham, 2 in Edmonton, and 1 each in Croydon, Bexley, Acton, Hornsey, and Ilford.

The Metropolitan Asylum Small-pox Hospital contained 898 patients on Saturday 17th, against 830 and 838 at the end of the two preceding weeks; these included 85 convalescent cases at Limehouse. It is satisfactory to find that no death has occurred in the hospital at Limehouse since it was opened a few weeks since.

Correspondence.

"Audi alteram partem."

THE MEDICAL FACTS AND EVIDENCE IN THE CASE OF THE QUEEN v. TREADAWAY.

To the Editor of THE LANCET.

SIR,—On Feb. 8th, 1877, at the Old Bailey, Frederick Treadaway was sentenced to execution for the wilful murder of John Collins, and was found guilty of an attempt to take the life of Mrs. Collins. As the defence was in great part of a medical character, and the case a very peculiar one, it may be interesting to your readers to learn the medical facts of the trial. This appears to be all the more necessary, as the reports of the evidence, as given in the daily newspapers, were very imperfect and inaccurate, and in some of the leading articles even strictures were passed on the nature of the defence. It is not my intention to enter into legal questions, to discuss the general evidence, or to question the decision of the jury; I propose only to record the medical history and condition of Treadaway and the professional evidence given in his defence.

On Dec. 23rd, 1876, I was requested by the prisoner's solicitor to investigate his bodily and mental condition, and after five prolonged interviews with him, the following are the results of my inquiries.

Frederick Treadaway, aged twenty, a hosier's assistant.

Family history.—According to the report handed to me by the solicitor and to inquiries made by myself, Treadaway is the eldest son of nine children. His eldest sister suffered from "brain fever" when a child, had delirium and convulsions, and was subsequently paralysed for six months. His father is a man of depressed and melancholic temperament. His aunt died during an epileptic fit at the age of twenty-two, having suffered from this disease all her life. Both his grandparents were persons of depressed and nervous habit, his grandmother being described as incompetent and requiring a companion to be always with her. One granduncle died imbecile; a second granduncle committed suicide; and a third granduncle died in a "fit." A grandaunt is described as a woman of "strange behaviour." His great-grandmother was imbecile. One great-granduncle was imbecile; another was an inmate of St. Luke's Asylum. The daughter of a great-grandaunt was an inmate of Hanwell Asylum. On the mother's side two granduncles were insane.

Personal history.—Treadaway states that he was quite healthy till about two years ago. For twelve months prior to this he had indulged in great sexual and alcoholic excesses. With this exception he had before and has since led a steady and temperate life. Shortly after this he became very subject to frequent and severe headaches of a stabbing and throbbing character, which symptom has lasted to the present time. During the last two years he has had six or eight seizures of unconsciousness, or, as he calls them, "fainting fits." All these have been of similar character, some of them, however, being more prolonged and severe than others. He described them as follows:—While in ordinarily good health, without apparent cause, he suddenly experienced a severe shooting pain and throbbing in his head, followed by a giddy sensation, in which everything seemed to turn round. He staggered and had to lay hold of something for support. He had the sensation of a "black cloud" coming over him, and then he lost consciousness. On recovering his senses (he thinks in a few minutes) he suffered from headache and felt confused in his ideas. In a short time this latter passed off, and he was able to walk on, in an hour or so he was again quite well. During the last two years, and only since then, he has been subject to occasional involuntary micturition during sleep. This occurred every month or two, and without apparent cause. He has ever since then complained of various (nervous) pains, sometimes in the branches of the fifth nerve, but more especially in the cardiac region, where he describes a severe pain and a sensation as if a cord was being tightly pulled round his chest. About the middle of August last he was out of employment, and had in consequence to live at home. Although he was supported by his family and received every kindness at their hands, he gradually became depressed and despondent. He brooded over his "misery," and finally became so melancholic (apparently without cause) that he several times contemplated putting an end to himself by suicide. Several methods suggested themselves to his mind, such as drowning, but he finally decided to shoot himself, as being, he thought, the most expeditious method. Hence the purchase of a revolver.

On the morning of December 15th (the day of the crime) Treadaway says he awoke with a severe headache, and felt generally unwell. While sitting talking with Collins on indifferent subjects he experienced a throbbing in his head, followed by giddiness, and the sensation of a black cloud and darkness coming over him. From that moment he remembers nothing till he found himself in the street. For the remainder of the day he felt dazed and confused, and it was not till the following morning that he thoroughly realised his position.

With the above exception he has always considered himself a perfectly healthy person.

Present condition.—Treadaway is a youth of fair complexion, somewhat short stature, well built, and healthy-looking. His forehead is low, and his head small. There is nothing abnormal about his appearance; on the contrary, his countenance is frank, open, and decidedly pleasing. His statements are perfectly consistent. He makes no attempt to conceal anything connected with himself or the crime of which he is accused, but explained it as above mentioned, and expressed the greatest sorrow and horror at its results. Altogether his conduct and conversation impressed me favourably. On physical examination all his organs were found healthy.

Commentary.—In my report to the solicitor I concluded the examination of the above statement by saying, "If the preceding assertions can be established the following conclusions might be deduced:—

"1. That as insanity or some form of nervous disease has

existed in the family of both the parents of Treadaway for several generations, to a large extent on the male and to an appreciable degree on the female side, there is a strong presumption that Treadaway inherited a predisposition to nervous disease.

"2. That although the health of Treadaway is apparently normal at the present date, still, from the description that is given of the various symptoms from which he has suffered during the last two years, there is a strong probability that he has been affected with epilepsy.

"3. That although since August last he has been in bad circumstances, and has had certain vexations and troubles, he has greatly exaggerated their importance, has been unusually depressed in mind, and has several times contemplated suicide. These are indications of mental weakness.

"4. That Treadaway committed the crime of which he is accused during an epileptic seizure. In such a condition an individual is unconscious, and not responsible for any act which he may perpetrate.

"5. That, considering the consistent statement of Treadaway, and his accurate description of a complaint which is little known to the public, there is every probability that his assertions are in the main truthful.

"6. That, looking to his naturally kind and amiable disposition, his temperate habits, his making no attempt at concealment, his apparent want of motive to commit any crime, his inability to remember the details of his act and all the general circumstances of the case, the homicide would appear to be rather the result of disease than of malice or intended robbery."

Proofs.—During his first examination at the Westminster Police-court the prisoner had two "fits." No medical man was present, so that their nature remains uncertain.

During the trial at the Old Bailey the prisoner had a "fit." He suddenly uttered a smothered cry and fell down. When I reached the dock, perhaps a minute later, I found him lying on his side, held down by two or three warders, his body writhing, and his limbs being moved about in every direction. The face was slightly flushed, the eyes were widely open and staring, but the conjunctivæ were sensitive to the touch. The prisoner was immediately removed to the cell below the court. His condition then—that is, perhaps two or three minutes after the seizure commenced—was as follows:—He was lying on his back on the floor. At intervals there was powerful convulsive movement of all the muscles. The whole body, and especially the limbs, were thrown into such violent movements that it required two or three men to keep him from injuring himself or others. The head was thrown somewhat backwards, and there was slight tendency to arching of the back. The muscles of the jaw were contracted, although the countenence was not actually distorted. There was no evidence of the tongue having been bitten. Some of the movements seemed to be of a tonic, and others of a clonic, character. The movement of the muscles was such that the body was pushed hither and thither as it lay on the floor. The face was paler than at first. The eyelids, when opened, remained so, leaving the eyes partially exposed. The eyes were fixed and staring. The conjunctivæ were perfectly insensible to even the roughest touch; the pupils were widely dilated and insensible to the stimulus of light; the patient was perfectly insensible. I placed a large pinch of snuff in a quill which I had in my pocket, and blew it up his nostrils. There was no sign of sneezing or reflex action. The lips were covered with frothy saliva, but no appearance of blood. The respiration was impeded, and at intervals a quick inspiration was taken. The pulse was small, weak, and rapid; the arteries of the neck throbbed strongly. In what appeared to be about five minutes Treadaway drew a long sighing inspiration, after which the movements of the body almost stopped, and he at once began to sneeze. The conjunctivæ were then found to be sensitive to touch, and the pupils had contracted and acted on the stimulus of light. He remained in a drowsy and soporose condition, and did not speak. When asked repeatedly if he felt any pain, he never took any notice, but once he put his hand to his head. This condition remained for perhaps fifteen minutes longer, when it was seen that he would not be able to appear in court again that day. Half an hour later, when I saw him at Newgate, he had somewhat recovered, but was still in the same soporose condition. His muscles were relaxed, interrupted only by occasional slight twitchings of the limbs. He would not speak, but on one occasion when asked if he had pain pointed to his head, and said "knife." He also placed his hand over his heart, as if there was pain there. In this condition I left him. Next morning, when I saw him before the trial, he was quite well, and had passed a fair night, but had not his accustomed appetite for breakfast. Mr. Gibson informed me that he had this morning given the prisoner a pinch of the same snuff that had been used without effect on the preceding day; now it caused him to sneeze with great violence.

At the trial the following facts were established by witnesses:—(1) The hereditary history of insanity and epilepsy in the family; (2) the headaches; (3) having had at least ten fits some two years ago, and one last year; (4) the wetting of his bed during sleep; (5) his great depression and melancholia since August last; (6) his having suggested before more than one person ideas of suicide; (7) his appearing unwell the morning of the crime; (8) the epileptic seizure of the preceding day; and (9) the naturally amiable and affectionate disposition of the prisoner.

Medical evidence.—In the public newspapers this was imperfect, in many points, erroneous. I now endeavour to give the evidence *in extenso*. It was to the following effect:—Dr. Hughes Bennett: Although sane at the present time, it does not follow that the prisoner was conscious of his actions at the committal of the crime of which he is accused. According to all the circumstances of the case, the facts proved,—and if the statements of the prisoner are correct there is every probability—that he is an epileptic. There are several forms of epilepsy. The popular idea of the fit is that which is accompanied with convulsions. There need not necessarily be convulsions, but only loss of consciousness. This latter has been called epileptic vertigo. These two forms may alternate with one another. Owing chiefly to the writings of Hughlings Jackson, Maudsley, Russell Reynolds, Hammond, Trousseau, Falret, Esquirol, and others, epileptic vertigo is a recognised disease. There is abundant testimony to show that, during such seizures, persons may perform actions and even speak and answer questions automatically. There are numerous examples in the works of the above authors proving that in an unconscious condition persons can progress from odd or eccentric actions to deeds of violence, suicide, or murder—being unable to remember the circumstances afterwards, and therefore irresponsible for their actions. Quoted instances in his own experience, more especially two cases. The first was that of a gentleman of the highest education and integrity. He was an officer in a Peninsular and Oriental steam-ship, in which he (Dr. Bennett) happened to be travelling. Various statements were from time to time made and amply witnessed of odd things this gentleman had done, and of which he had always denied any knowledge. During Dr. Bennett's personal knowledge of him he had several times attempted to commit suicide in different ways. He was prevented from doing so by others, and a few minutes afterwards, when he came to himself, he was totally unconscious of having made any such attempt. He fancied he was being made the subject of a hoax. He several times tried to throw himself overboard. He on one occasion attempted to poison himself, but drank by mistake an innocuous fluid. These attacks came on about once a month. During the intervals he was perfectly sensible and intelligent, and could not imagine what induced him to do what he did. Finally, one day Dr. Bennett found him looking ill. He was asked what was the matter. He replied that he felt very unwell, but did not know why. Opium-poisoning was suspected, and subsequently about a pint of laudanum was extracted from his stomach with a stomach-pump. He had taken it out of the surgery, and was afterwards quite ignorant of the fact. On account of these seizures he was dismissed from the service, which ruined his career in life. Another case was cited, where a respectable married man had sudden temporary fits of unconsciousness; while they lasted he assaulted his wife, children, the other patients in the ward or anyone who was beside him, although when in his senses he was a most affectionate husband and father. He was perfectly ignorant of what he was doing, and was deeply distressed at the results of his violence. A person might suffer from the epileptic vertigo without knowing it. Epilepsy in all its forms is hereditary. There is a certain affinity between

insanity and epilepsy, in so far that insane parents may beget epileptic children, and *vice versâ*. The prisoner's family was strongly tainted with insanity and epilepsy, and therefore it is probable that he inherits a predisposition to nervous disease. Dr. Bennett stated in detail the symptoms described to him by the prisoner. Sexual and alcoholic excesses are considered by many to be an exciting cause of epilepsy. This occurring shortly after puberty, with a predisposition to disease, might cause nervous affections to manifest themselves. The description the prisoner gives of his fainting fits is quite consistent with attacks of epileptic vertigo. Frequent throbbing in the head without apparent cause, in a young healthy man, is consistent with epilepsy, and is a common symptom of this disease. Involuntary micturition during sleep without cause was also met with in such cases, indicating an attack during the night. The neuralgic pains, especially the angina pectoris, sometimes accompany epilepsy. The attacks the prisoner describes must be one of two things, either epilepsy or ordinary fainting. From any single attack it would be difficult, from his description, to distinguish between the two. Assuming the statement of the prisoner to be correct, and taking the family history and the other nervous symptoms into consideration, the evidence appears to be in favour of epilepsy. It is quite possible that a crime might be done during an epileptic seizure. The fact that the prisoner was depressed and melancholic without sufficient cause, and his constant statements that he was miserable and anxious to "put an end to himself," indicated, in Dr. Bennett's opinion, an abnormal mental condition. The fit the prisoner had in court yesterday was, in Dr. Bennett's opinion, somewhat an anomalous one, but was of an epileptic character, indicated chiefly by the total unconsciousness and the dilated and insensible pupils.—Cross-examined: In the ordinary acceptation of the term the prisoner could not be said to be insane. While in a state of epileptic unconsciousness a person might commit almost any act without knowing it. The attack itself did not generally last more than three or four minutes, but the effect of it might last several hours. Taking the attack which occurred last July alone, there is nothing from the description inconsistent with an ordinary fainting fit. Epilepsy is a disease of the brain.

Dr. Rhys Williams, superintendent of the Royal Hospital, Bethlem, had seen many cases of epileptic vertigo, and he corroborated the evidence of the last witness that this was an acknowledged form of disease. He described a case in which a gentleman, while sitting at breakfast, had assaulted his wife with a table-knife, and afterwards was not able to give any explanation of his conduct. He was subsequently under medical treatment for fourteen months for epileptic vertigo. Everything done by a person while suffering under an attack of epileptic vertigo was automatic; they were then mere machines, and would afterwards have no knowledge of anything that occurred during the attack. When he recovered a patient might feel that he had done something, but he would not know what. The longest instance of unconsciousness of this kind that he was acquainted with was one hour. The witness stated that all the symptoms that had been described in this case with regard to the prisoner were consistent with the idea that he was suffering from epileptic vertigo. He had seen the prisoner on the previous day in the cell below the court, and he found him perfectly unconscious, and the pupils of his eyes were dilated. He had no doubt that it was an epileptic fit, with hysterical symptoms. He regarded epileptic lunatics as the most dangerous of all those afflicted with insanity, and such persons are most likely to commit sudden acts of violence.

Mr. Richards, superintendent of Hanwell Asylum, had great experience in epilepsy, himself treating on an average 115 cases per annum. He had seen several cases of epileptic vertigo. He agreed in the opinions expressed by the last witnesses with regard to the nature of this disease. He had been several times attacked by patients suffering from epileptic vertigo. On one occasion an epileptic patient was talking pleasantly to him, when suddenly her eyes became vacant, and she hit out at him. She appeared to recover immediately, and he asked her why she had struck out at him, and she said she did not know that she had done so, and appeared quite unconscious of what had taken place. A few days later this patient had a violent attack of epilepsy. He saw the prisoner yesterday when he was unconscious, and he was of opinion that it was an epileptic fit with some modified symptoms.

Dr. Smiles, surgeon to the House of Detention, said prisoner was under his care from Dec. 18th to Jan. 15th. During that time he was in good health, and never on any occasion exhibited any appearance of epilepsy. With regard to the attack of the previous day, he was of opinion that there was a good deal of hysteria mixed up with it. He heard a young woman who had been examined as a witness utter an exclamation which evidently affected the prisoner and brought on the attack. He had no opportunity of seeing the prisoner except from the court, and he did not go into the gaol. (It is to be observed that this witness was on the bench. The prisoner's attack took place on the floor of the dock, and chiefly in the cell below the court.)

Dr. Gibson, surgeon to Newgate, said prisoner had been under his charge since the 15th of January. While under his observation he had been perfectly healthy. Although the chief symptoms of yesterday's attack were those referring to a hysterical condition, the graver of them were of an epileptic character. There might be a distinct convulsive attack in those cases without any premonitory symptoms. Strong efforts had been made to restore him after he was taken from the dock, and a quantity of snuff was blown up his nose, but was not followed by any effect. This morning he had given the prisoner a pinch of the same snuff, and it caused him to sneeze violently.

The jury were asked to decide whether at the time the prisoner fired the revolver he was conscious and knew the nature of his act. They answered in the affirmative, and found him "guilty." He was accordingly sentenced to death.

Such are the medical facts and evidence in this remarkable case. The jury have found Treadaway guilty, nor am I prepared in any way to question their decision. There was no defence whatever except the question as to whether, as the prisoner stated, he was unconscious of his act. The judge admitted that no proof whatever could be obtained of any motive for the crime. In the interests of justice and humanity it was, therefore, incumbent on those entrusted with the task to carefully collect all the statements and facts concerning the prisoner's health, and in laying them before the authorities it was their duty conscientiously to draw from them such inferences concerning the prisoner's condition as would assist the jury in the performance of their most responsible duty.

I remain, Sir, your obedient servant,
A. HUGHES BENNETT, M.D.

ON THE PROTECTIVE INFLUENCE OF VACCINATION.

To the Editor of THE LANCET.

SIR,—At a time like the present, when small-pox is prevalent and likely to become more so, it may be well to consider carefully to what extent vaccination affords security against the disease. Everyone is now asking if he should be revaccinated; some say the last time they were done the operation was successful; others that it had no effect; and all are anxious to know if they are safe from small-pox.

Assuming that efficient vaccination is completely protective against small-pox, as I believe it is, let us, before answering the above question, consider for a moment what is meant by efficient vaccination.

Those, I take it, who are efficiently vaccinated are they who are no longer susceptible of the vaccine poison. In a certain number of individuals one vaccination (usually performed in infancy) is sufficient to obtain this result; others will require to have the process repeated, some once, some twice, and some several times, before the desired effect is produced. We do not know beforehand who of the community are protected by a single vaccination and who are not, except by the crucial test of repeating the operation, and we cannot be sure that anyone is efficiently vaccinated until he has shown his power to resist the effects of the vaccine matter.

Therefore, so long as a person was successfully vaccinated the last time so long is it uncertain that he will not take

again, and so long as he is liable to be affected by vaccination so long is he liable to take the small-pox. Thus, then, returning to the question of revaccination, we may advise those who did not take last time that they are efficiently vaccinated, and recommend those who did take to be done again. It is clearly necessary to be certain that in every instance the vaccine matter used is pure and effective, otherwise we may be led into grievous error, and our opinions fall into disrepute. It is not at all unlikely that many persons who think themselves proof against vaccination, and consequently small-pox, may have been led to that conclusion by the inertness of the lymph employed—a mistake that is found out too late when they get the small-pox. To guard against this it will be necessary for all medical men to be most careful in the selection of their lymph, as no greater responsibility can rest upon them than the effectual performance of vaccination.

It is suggested by some authorities, and believed by most of the public, that the protective influence of vaccination wears out with time, some think in seven years, some in fourteen, and some cannot say when. But is this true? I venture to think not.

That a considerable number of persons are completely protected, and for life, by the one vaccination in infancy, is evidence against the wearing out of the safeguard; and, arguing by analogy, we do not find that the protection afforded by one attack of whooping-cough, measles, chicken-pox, scarlet fever, &c., wears out as life advances.

Doubtless some of these diseases occur twice or oftener in the same person, but this rather illustrates a peculiar susceptibility than any wearing out of the safety afforded by a previous attack. Even small-pox is not invariably protective against itself, and it would seem as if the necessity for revaccination were due not so much to a wearing out of its influence by time, as to the difficulty of exhausting the susceptibility to the disease in many persons by one, or even two inoculations of the vaccine matter. Whether any one vaccination is completely protective for a time in those who subsequently take again, and, if so, what that time may be, we do not know.—Your obedient servant,

Harley-street, Feb. 10th, 1877. JULIUS POLLOCK.

THE LATE LADY SMITH.

To the Editor of THE LANCET.

SIR,—The recent death of Lady Smith, a resident of Lowestoft, at the advanced age of 104 years (had she lived to next May) has possibly been brought before your observation, inasmuch as most of the daily journals have reported the occurrence. I think, therefore, the following details of the physical and mental condition of a lady of so advanced an age, accompanied as it is with such indisputable evidence of the correctness of her date of birth, will prove interesting to many of your readers.

Miss Pleasance Reeve was born May 11th, 1773, and died February 3rd, 1877, approaching the completion of her 104th year. In the year 1796, having attained the age of twenty-three years, Miss Pleasance Reeve was married to Sir James Edward Smith, M.D., F.R.S., afterwards President of the Linnæan Society. In 1828 she became a widow, and soon after took up her residence at Lowestoft. From this date to her decease, comprising a period of nearly fifty years, I had frequent opportunities of observing her physical and mental condition. In configuration Lady Smith was about 5 ft. 3 in. high, erect in figure, and, to within about twenty years of her death, weighed about ten stone; from that time she gradually lost weight. Her circulation to the last was strikingly regular, averaging sixty-five pulsations in the minute. There was no evidence of atheroma of the vessels, and the arcus senilis was scarcely visible, although a few years previous to her death cataract had manifested itself in both lenses. Her hearing was but slightly impaired, her respiration was uniformly quiet. She had lost her molars for many years, but the incisors and bicuspids of both jaws remained perfect to the age of 100, from which date they commenced to decay; several, however, were perfect at death. The gastric and intestinal functions were always regular. I never knew her to complain of dyspepsia, or to suffer from headache; she had never given birth to children.

She had not passed through life without ailments, which on one or two occasions assumed a serious type. Previous to her residence in Lowestoft she had suffered from an attack of rheumatic fever. The first serious illness for which she consulted me was in 1873, for abscess of the inguinal glands of both regions, which attack considerably enfeebled her for many weeks, from which she ultimately recovered. In 1874 she passed through an alarming attack of bronchitis, and at one period of this illness I doubted her recovery. She was not free from an occasional attack of gout in the feet. With the exception of the above-named illnesses, she enjoyed excellent health, and although of late for some months she was gradually declining in health, yet the immediate cause of death must be attributed to her having received a chill, which was followed by pericarditis. The vigour of her mental powers surpassed even that of her body. Her memory of the past and present was scarcely impaired. Literature was her delight, and to within a few weeks of her death she conversed on and listened with pleasure to the general topics of the day. Her habits of life were extremely simple. She retired usually at 9 P.M., and, as a rule, slept well until 8 o'clock in the morning, except in the summer months, when she was in the habit of rising for a short time to watch the rising of the sun. She breakfasted at 9 A.M., and invariably slept for a short time after the meal. She dined at 2 P.M., again taking a short sleep. From her dinner to her breakfast she fasted, with the exception of taking a quarter of a glass of beer in the evening. She ate and drank moderately; in the way of stimulants, scarcely ever exceeding during the day a glass of beer and a glass of wine.

During the summer months her mornings were employed in reading and writing, the afternoons in carriage exercise. In the winter she usually drove out in the morning; she, however, never lost an opportunity of taking open carriage exercise during the whole year, having driven out to within three weeks of her death, and she was by no means particular as to the state of the weather, as she considered pure air indispensable to her health. Her habits of reading were only interrupted at the age of one hundred years; from that time she was unable to read comfortably, but she corresponded with her friends, and transacted her business matters to within a week or so of her death. I think her writing so remarkable that I enclose a specimen written at the age of one hundred years and six months. Her temperament was remarkably calm and placid, and no truer account of her general social characteristics can be given than by quoting from the paragraph given in *The Times* of Feb. 5th:—"Those who knew her need not be reminded of the memory, the intelligence, the sympathy with all that was beautiful in poetry and in nature, the graceful courtesy of manner, the openness of heart, the freedom from prejudice and narrowness of mind, the expansive benevolence and true Christian charity, which all remained unblighted by the snows of more than a century of years."

Extract from the parish register, p. 393. "Christenings in Lowestoft, A.D. 1773. May 12th, Pleasance, daughter of Robert and Pleasance Reeve. (Signed) John Arrow, Vicar." And in the family Bible is found the following entry made by the father:—"11th May, 1773. The said Pleasance was delivered of a daughter about one in the afternoon, and (she) was baptised by the name of Pleasance." I am, SIR, yours truly,

Lowestoft, Feb. 14th, 1877. W. C. WORTHINGTON, F.R.C.S.

TREATMENT OF HYDROPHOBIA IN GLASGOW ROYAL INFIRMARY.

To the Editor of THE LANCET.

SIR,—The attention of the Weekly Committee of Managers of the Glasgow Royal Infirmary having been called to certain paragraphs in the newspapers containing charges of cruelty in the treatment of two patients who were thought to be suffering from hydrophobia, I am instructed to state that the matter has been carefully investigated by a committee of the managers, who report that grave doubts existed at the consultations held by the medical staff on the cases as to the true character of the disease; that the tests employed were entirely with a view of deciding this question in order to the adoption of the most appropriate treatment; and that these tests were those recommended by the

highest authorities on the subject, and were used in the most skilful and humane manner. I am requested to add that the intrusion of the dog into the ward was a purely accidental circumstance, the dog having been a pet which had accompanied a lady visiting the institution (not the ward) on a mission of mercy.

Your obedient servant,
HENRY LAMOND, Secretary.

93, West Regent-street, Glasgow,
20th February, 1877.

THE CHILDREN'S HOSPITAL, PENDLEBURY.

To the Editor of THE LANCET.

SIR,—I have simply to state, in answer to Dr. Rayne's letter in your impression of Saturday last, that the interview he had with me at my office was almost entirely taken up by him with complaints of and charges against the late house-surgeon of the hospital, between whom and himself there had been continual differences during Dr. Rayne's year of office, which I considered of a very childish character. One of the cases about which a difference had arisen was the one which seems to have occasioned this correspondence, and upon going into the details of this and several other cases, Dr. Rayne, after a series of illogical arguments, admitted having acted under the influence of temper, upon which I frankly told him that this admission sufficed to show that he was unfit to continue in the position of assistant-physician to the charity.

I remain, Sir, yours faithfully,
H. M. STEINTHAL,
Vice-Chairman of the Board of Governors of the General Hospital and Dispensary for Sick Children.

Manchester, 20th February, 1877.

PARLIAMENTARY INTELLIGENCE.

For the week ending February 22nd.

HOUSE OF COMMONS.

ARMY MEDICAL OFFICERS.

Dr. LUSH asked the Secretary for War whether, seeing the continued indisposition to enter her Majesty's service in the Medical Department of the Army evinced by the scarcity of applications for commissions, he could hold out any prospect of the condition of that service being improved; and especially whether he was prepared to place the medical officers upon the same footing as other officers with regard to exchanges.

Mr. HARDY: Considering the very short time the new system has been established, I do not consider 56 candidates a small number to have presented themselves since August last. Thirty-three passed through the school this month and will be duly commissioned, and 23 are now under examination. Further, it should be remembered that three departments are competing at the same time for medical men, and that India, being the best paid, of course monopolises the largest share. I may mention that the greater number of vacancies is caused by the retirement on half-pay through ill health of medical officers of 20 and 25 years' service. With regard to exchanges, I have on a former occasion stated to this House that each application is considered on its own merits, and the Director-General of the Army Medical Department uses discretionary power in recommending or refusing the indulgence, having due regard to the officers' services at home. In fact, no application has been refused when an officer has been at home under three years.

CRUELTY TO ANIMALS.

Mr. MUNDELLA moved for an address to Her Majesty for a return of licences granted under the Act (39 and 40 Vict., c. 77) to amend the law relating to cruelty to animals.

Mr. CROSS said he had not the slightest objection to any return that called in question the action of the Home Secretary in administering this or any other Act, but at the same time this was a matter of some delicacy, concerning not merely the Home Secretary, but some of the highest professional men in the kingdom. He proposed to alter the return, and if it did not then satisfy the hon. member he could ask for further information. He then moved for the return in the following amended form:—1. The number of persons to whom such licences have been granted since the Act came in force, and the names of the places registered under the Act. 2. The number of licences in which the (optional) provision (Clause 7) requiring that the place wherein the experiment is performed shall be registered has been inserted. 3. The number of certificates which have been received under Clause 3 permitting experiments as illustrations of lectures to students. 4 The number of certificates which have been received under Clause 5, permitting experiments on cats, dogs, horses, mules or asses. 5. The number of certificates (special) which have been received for performing experiments without anæsthetics, and the number of such experiments in which curare has been employed. 6. The scientific authorities who have in each case granted such certificates.

After some remarks, the amended return was agreed to.

LIMEHOUSE SMALL POX HOSPITAL.

Mr. RITCHIE presented a petition from the inhabitants of Limehouse, containing 16,000 signatures, and moved the appointment of a Select Committee to inquire into the circumstances attending the establishment of a small-pox hospital in Limehouse, and into the powers and duties of the Metropolitan Asylums Board.

After an explanation from Mr. SCLATER-BOOTH, the motion was withdrawn.

CANAL BOAT POPULATION.

Mr. HEYGATE asked whether the Government proposed to carry out the recommendation of the Factory and Workshops Acts Commissioners, that "the residence in canal boats of female young persons, and of children above the age of three years, should be forbidden" by legislation, in the present session.

Mr. CROSS: The question is one which deserves attention. Everyone must admit that the state of our canal population is unsatisfactory, and too much praise cannot be given to Mr. Smith for his efforts to better their condition. I am not prepared to adopt in their entirety the suggestions made by the commissioners in their report; but I feel that, if persons sleep on board canal boats, they ought to be registered in some way analogous to the registration of common lodging-houses.

VACCINATION.

Mr. S. BOOTH, in reply to Mr. Wethered, said the Local Government Board had heard of the death of three children near Gainsborough from erysipelas following from vaccination, and an inspector had been asked to make a careful investigation into all the circumstances of the case. It was true that the children were vaccinated from lymph taken from a child which had been vaccinated from points supplied by the National Vaccine Establishment. That child, however, was not suffering from erysipelas, and it seemed certain that the lymph furnished from the child did not contain any infection of erysipelas.

THE SANITARY STATE OF THE WAR OFFICE.

Mr. NOEL, in reply to a question by Sir W. Fraser, replied that the report of the committee appointed to report on the sanitary condition of the War Office had been already moved for, and would be at once printed.

SCURVY AMONG THE ARCTIC CREWS.

Mr. W. HUNT, in reply to Dr. Ward, stated that he had appointed a committee to inquire into the cause of the outbreak of scurvy during the recent Arctic Expedition. That committee had made considerable progress, and he hoped in a fortnight to lay the report and the evidence before the House (hear, hear).

SURGEONS IN THE VOLUNTEER FORCE.

Mr. HERBERT asked whether it was the intention of the Secretary of State for War to grant the request of the surgeons of the Volunteer Force, and give them the instructions necessary to enable them to teach a certain number of men of their respective regiments the difficult duty of carrying sick and wounded men in case of war; and whether such instructions were carried out in the army generally.

Mr. HARDY replied that the question was not before him at present, and that no general instructions had been issued to the army generally on the subject.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. — The following gentlemen were admitted Licentiates of the College on the 21st inst. :—

Bevan, Richard, New Romney, Kent.
Byam, Samuel Henry, Milner-street.
Cameron, Charles Hamilton Hone, Bethlem Hospital.
Clubbe, Charles Percy Barlee, St. Bartholomew's Hospital.
Cooper, Peter, Tavistock-street, Bedford-square.
Dawson, Cautley, Leeds.
Edwards, Frederick Swinford, St. Mark's Hospital.
Gorst, Henry, Royal Infirmary, Liverpool.
Goulder, Frank Samuel, Woodbastwick, Norwich.
Irvine, Delaware Lewis, Newcastle-on-Tyne.
McDonagh, George Raymond, M.B., Kennington-road.
Rees, Alfred, Maesteg, Glamorganshire.
Roughton, James Woolley, Birkbeck-street, Norwood.
Rudduck, John Burton, London Hospital.
Stevenson, Lesder Henry, Guy's Hospital.
Symonds, Edmond, Thaxted.
Turner, Edward Beadon, Sussex-gardens.
Tyrrell, Robert Shaw, M.B., Kennington-road.
Webb, John Rheece Wynn, St. George's Hospital.
White, Charles Haydon, Brathay House, Tufnell-park.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following gentlemen, having passed the required examination, received their diplomas in Dental Surgery at a meeting of the Board of Examiners on the 9th inst. :—

Bell, Martin L., Dental Hospital.
Glassington, John H., Fulham-road.
Greenfield, John, Brook-street, Hanover-square.
Harcourt, A. B. B., Trinity-square.
Smith, William T., Dental Hospital.
Stirling, John, Sandgate-street, Ayr, N.B.
Tod, Ewen M., Colville-road, Bayswater.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Feb. 16th :—

Horrocks, Peter, Over Darwen, Lancashire.
Scott, John William, Dunfield, Sheffield.

UNIVERSITY OF DUBLIN. — The following degrees were conferred last week :—

BACHELOR IN SURGERY.—Richard Edmund Biddulph.
MASTER IN SURGERY.—John St. George Browne, David Wilson Orr.
BACHELOR IN MEDICINE. — Robert Ryan Beatty, John Vincent, Joseph Conolly, John Walton.
DOCTOR IN MEDICINE.—John Edward Barker, Dudley Loftus Fitzgerald, Samuel Gordon, Richard Henry Quill, Sidney Hamilton Taylor.

YELLOW FEVER has again appeared at Bahia, and has affected the natives, as well as the crews of the shipping in that port.

MRS. FRANCES ELIZABETH HOGGAN, of Trevor-terrace, Rutland-gate, has, after due examination, been recently admitted a licentiate in medicine and midwifery of the King and Queen's College of Physicians in Ireland.

THE adjourned summons against a number of foreign provision dealers living in the Soho district, for selling French preserved peas alleged to be adulterated with copper, came before the magistrate at the Marlborough Police-court a few days back. Nominal fines were inflicted on two of the defendants, and the other cases were again adjourned. We must defer comment on the matter until next week.

Medical Appointments.

ANDREW, Dr. E., has been unanimously elected Honorary Consulting Surgeon to the Montgomeryshire Infirmary.
BEYDEN, R., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Kentisbeer District of the Tiverton Union.
CUMBERBATCH, A. E., F.R.C.S.E., has been appointed Aural Surgeon to the Great Northern Hospital, vice Harvey, deceased.
FOSTER, W. J., L.F.P.S.G., L.S.A.L., has been appointed House-Physician to the Westminster Hospital, vice Cane, whose appointment has expired.
GILLAM, T. H., M.R.C.S.E., L.S.A.L., has been appointed House-Surgeon to the Great North rn Hospital, vice Carter, resigned.
GREENE, R., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Resident Medical Superintendent of the East Riding Lunatic Asylum, Beverley, vice Mercer, deceased.
HAMLET, W. M., F.C.S., has been appointed Public Analyst for Lynn. £5 5s. per annum, and 10s. 6d. per analysis.
HELLIER, J. B., M.B., has been appointed Resident House-Physician to the Hospital for Women, Soho-square, vice Joseph, resigned.
MCLACHLAN, W. A., M.B., has been appointed Medical Officer for the Parish of Cardross, Dumbartonshire, vice Graham, deceased.
MORGAN, J. H., F.R.C.S.E., has been appointed second Surgeon to the St. George Provident Dispensary, Mount-street.
ORR, H., L.R.C.P.Ed., L.R.C.S.Ed., L.A.H.D., has been appointed Medical Officer and Public Vaccinator for the Longnor District of the Leek Union, vice Dakeyne, deceased.
PATCHETT, J., L.R.C.P.Ed., L.F.P.S.G., has been appointed Medical Officer of Health for the Great Harwood Urban Sanitary District.
PRICHARD, R. M., M.B., C.M., has been appointed House-Surgeon to the Denbighshire Infirmary and General Dispensary, Denbigh, vice Evans, resigned.
PYE-SMITH, R. J., F.R.C.S.E., L.R.C.P.L., has been appointed a Surgeon to the Sheffield Public Hospital and Dispensary, vice Jackson, resigned.
RABAGLIATI, A. C. F., M.D., L.R.C.S.Ed., has been appointed a Surgeon to the Bradford Infirmary and Dispensary, vice Lawrie, deceased.
ROBERTS, Mr. J. G., has been appointed second Assistant Dental Officer to the Liverpool Dental Hospital.
SANDER, W. H. F., M.R.C.S.E., has been appointed Junior House-Surgeon to the Infirmary and Dispensary, Bradford, Yorkshire, vice Denby, resigned.
STUART, J. B., M.B., C.M., has been appointed House-Surgeon and Apothecary to the Northern Infirmary, Inverness, vice Lepper, resigned.
VERRALL, T. J., L.R.C.P.L., M.R.C.S.E., has been appointed Acting Medical Officer for No. 5 District of the Brighton and Hove Provident Dispensary, vice Beavan.
WADE, R., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Burnham District of the Axbridge Union, vice Phelps, resigned.
WILLIS, G. O., L.R.C.P.Ed., L.R.C.S.Ed., F.F.P.S.G., has been appointed a Surgeon to the Monmouth General Hospital and Dispensary, vice Wilson, resigned.
WILSON, G., M.R.C.S.E., L.S.A.L., has been appointed Consulting Surgeon to the Monmouth General Hospital and Dispensary, on resigning as Surgeon.
WILSON, T., M.D., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Tottington No. 2 District of the Bury Union, Lancashire, vice Smith, deceased.

Births, Marriages, and Deaths.

BIRTHS.

CARTER.—On the 17th inst., at Lichfield, the wife of Graham Atherly Carter, M.D., of a daughter.
EAGER.—On the 14th inst., at The Limes, Woking, Surrey, the wife of J. Cawley Eager, prematurely, of a son.
FLEURY.—On the 11th ult., at Monte Video, the wife of Louis A. Fleury, L.K.Q.C.P.I., of a daughter.
LARKIN.—On the 14th inst., at Trinity-square, Southwark, the wife of F. G. Larkin, M.R.C.S., of a son.
MAPOTHER.—On the 19th inst., at Merrion-square North, Dublin, the wife E. D. Mapother, M.D., of a son, who lived only a few moments.
MAUNSELL.—On the 15th inst., at the Curragh, the wife of S. E. Maunsell, L.K.Q.C.P.I., Surgeon-Major, Army, of a son.
THAYER.—On the 20th inst., at Northumberland-terrace, Regent's-park, the wife of L. O. Thayer, M.D., of a son.

MARRIAGES.

FLETCHER—BROOK.—On the 21st inst., by licence, at the Calverley Parish Church, by the Rev. J. W. Hatton, Vicar, F. A. C. Fletcher, L.R.C.P., L.R.C.S., & L.M.Ed., of Eastburn, Yorks, to Jane, youngest surviving daughter of the late Samuel Brook, of Albion House, Pudsey.
MCCARTHY—PRITCHARD.—On the 20th inst., at Edgbaston Old Church, by the Rev. Isaac Spooner, Justin McCullum McCarthy, M.R.C.S.E., L.S.A.L., of Oakengates, to Florence Mary Pritchard, third daughter of W. M. Pritchard, Esq., of Brierly-hill.

DEATHS.

BARBOUR.—On the 12th inst., at Bournemouth, John B. Barbour, M.D., aged 42.
DUKE.—On the 15th inst., at Rugby, Abraham Duke, M.D., aged 67.
DYKES.—On the 25th ult., at Ashover, William A. S. Dykes, Surgeon, aged 37.
GODDEN.—On the 15th ult., at Eastbourne, Joseph Godden, L.K.Q.C.P.I., aged 54.
HUMPHREYS.—On the 16th inst., at Harley-street, Thomas Humphreys, Surgeon, aged 60.
LECKIE.—On the 4th inst., at Kelvin, Alexander Leckie, C.M., aged 79.
LENEY.—On the 27th ult., at Strabane, co. Tyrone, Alexander Leney, M.D., aged 77.
POMFRET.—On the 19th inst., Henry Lacy Pomfret, M.R.C.S.E., of Hollingsworth, aged 61.
STONE.—On the 7th inst., at Coleraine, William P. P. Stone, L.K.Q.C.P.I., aged 29.
WOOD.—On the 15th inst., at Woodbank, Southport, Peter Wood, M.D., aged 65.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Dr. Reeve's Journal of a Residence at Vienna and Berlin.
Mr. A. Hill: Reform in the Dental Profession.
Mr. G. P. Bevan: Industrial Classes and Industrial Statistics.
Reynolds' System of Medicine. Vol. IV.
Mrs. Warren: My Lady Help, and what she Taught Me.
Mortuary Experiences of the Mutual Life Assurance Co., New York.
New York Medical Journal. February.
Philadelphia Medical Times. February.
Australian Medical Journal. February.
W. Thomson: Third Analysis of the Statistics of Phthisis in Victoria.
Boston Medical and Surgical Journal.

Notes, Short Comments, and Answers to Correspondents.

THE STATE OF LUNACY IN ST. PETERSBURG.

THE Russian journal, *Messager du Département Médical*, gives the following information respecting the state of lunacy in St. Petersburg for the ten years 1866-1875. During the first part of this period the number of lunatics admitted into the asylums of St. Petersburg did not exceed on the average 200 a year. The lowest yearly number of admissions in this period, 134, occurred in 1867; the highest, 195, in 1866. In 1870 the number of admissions increased to 262, and each year afterwards showed a larger number until 1874, when the admissions reached 382. This augmentation was in part accidental—that is to say, it arose from the enlargement of some of the asylums, admitting of a greater number of lunatics being submitted to treatment. But this does not explain, it is said, the whole phenomenon of the increase, and the principal cause of it is attributed to a positive augmentation of the number of mentally afflicted in St. Petersburg. In confirmation of this conclusion, reference is made to the increasing number of suicides in the city during recent years. The total number of lunatics under treatment in the asylums in the ten years 1866-1875 was 2549: 1412 males and 1137 females; and of these 640 (25·5 per cent.) recovered; 723 (28·7 per cent.) were restored to their families in an improved state; 320 (12·6 per cent.) gave hope of near recovery; and 523 (20·5 per cent.) died. Recoveries were more frequent among the males (31·5 per cent.) than among the females (25·9 per cent.) In respect to age, the *Messager* observes that between the ages of 20 and 30 years the disposition to lunacy increases rapidly. Among the patients admitted into the asylums during the ten years under consideration, there were 131 from 15 to 20 years of age, 305 from 20 to 25 years, and 425 from 25 to 30 years. From 30 to 40 years the number of cases rests stationary, and after this period of life it diminishes very rapidly.

Beta.—2. Wagner; Wilks and Moxon; Green. We are unable to answer the first question.

Mr. W. M. Coates, (Salisbury.)—The case shall be published shortly.

PARTIAL TETANUS DURING CONVALESCENCE FROM PSEUDO-PNEUMONIA.

To the Editor of THE LANCET.

SIR,—The subject of this singular and fatal case was a gentleman, aged sixty-two, of a strongly-marked (hereditary) uric acid diathesis, frequently passing small uric acid calculi, and from time to time during the last few years subject to violent attacks of gouty dyspepsia and asthma. Temperament highly nervous. During the year previous to the present attack he had lost much flesh, perspired freely on slight exertion, but had been able to attend to his duties in town. Subsequent to his death I was informed that during the last few months he frequently, "while eating," bit his tongue so violently as to draw blood, and very shortly before his last illness, whilst at dinner, suddenly exclaimed, "By George, if I bite my tongue this way I shall die of tetanus." On Nov. 11th, 1876, he caught a severe chill, and felt very unwell, though not altogether laid up till the 16th, when symptoms of right pleuro-pneumonia set in, and later on slighter signs in left lung were developed. The patient, who was seen in consultation by Dr. Owen Rees, passed through the attack in a most favourable manner. On Dec. 3rd there was a free discharge of urine, and œdema of the ankles, which had existed during the illness, was removed. On the 5th the quantity of urine was normal; pulse 84; respiration 20. Expectoration still sanguinolent, thick, stringy, adhering to vessel, moderately abundant. Appetite not so good as usual, and a peculiar slowness in eating food was noticed both this day and on the 4th, the patient saying, "Oh, give me time, and I will eat it all, only I feel my breath short." So well, however, was the patient on the morning visit that I decided not to call in the evening. On Dec. 6th the patient awoke from a troubled sleep at 1.30 A.M. This was not an unusual circumstance; but he complained of feeling very queer. I saw him between 4 and 5 A.M., and on entering the room he said, "Ah, doctor, I have tetanus come on," and I found on examination his statement was too true. The tetanus was partial; the jaws were clenched; there was drawing back of the head, and swallowing was impossible. The abdominal muscles were not at all affected, nor were the arms or legs. All through his illness, however, there had been excessive tenderness complained of when pressure was made over either gastrocnemius. Drs. Owen Rees and Hughlings Jackson saw him in consultation. He died at 7 P.M., with tetanic symptoms slightly more marked, especially the risus sardonicus, the cause of the speedy death being due more to inability of expectorating than to the nervous symptoms.

Dr. Hughlings Jackson and Dr. Stargo performed a careful post-mortem examination two days afterwards, and found no condition in the nervous system to account for the symptoms. The lungs were in a state of recovery. The kidneys and bladder healthy and free from calculi. The heart was in a condition of dilated hypertrophy; valves competent; aorta and valves slightly atheromatous. There was an infarct in the spleen. No parts of brain or cord were allowed to be taken away for microscopical examination. Naked-eye appearances healthy, except some atrophy of brain, very commonly seen in those of the patient's age. No wound on tongue could be discovered. Yours truly,

RICHARD NEALE, M.D. Lond.

Boundary-road, St. John's-wood, February, 1877.

SOCIETY OF ARTS: CHEMICAL SECTION.

WE are requested to state that in consequence of an unfortunate accident to Mr. Charles W. Vincent, F.R.S.E., F.C.S., his lecture on Spontaneous Combustion in Factories and Ships is postponed.

X.—The qualification in question does not entitle the holder to put "Dr." on his door-plate and write "M.D." after his name.

CEREBRO-SPINAL MENINGITIS CAUSED BY AN ABSCESS OPENING INTO THE SPINAL CANAL.

AT one of the New York hospitals a rare case lately occurred. The patient, an adult male, entered the institution suffering from an abscess situated near the right sacro-iliac synchondrosis. There were no urgent symptoms complained of—nothing, in fact, besides lassitude and weariness. The abscess had existed about two years, and had been opened at different times. Shortly after admission to the wards it was again laid open, and very soon afterwards indications of spinal followed by cerebral meningitis were apparent, terminating fatally forty-eight hours after seizure. A post-mortem examination revealed a deposit of lymph and pus over the convexity of the anterior lobes of the brain, and both surfaces of the spinal cord were found deeply congested, and covered with the products of inflammation. On examining the abscess it was found to be situated mainly over the third and fourth sacral vertebræ, and in immediate relation to a large cancerous mass covering the bones. In the middle of the last lumbar vertebra there was found an opening sufficiently large to admit a No. 10 catheter, which allowed free passage of the contents of the abscess into the spinal canal.

W. P.—The conduct is quite consistent with mere vacillation, and it is always right to put the best construction on such conduct. In any case there is no breach of etiquette.

Mr. C. E. Priestley's letter shall be answered next week.

A PORTABLE "URINE CASE."

To the Editor of THE LANCET.

SIR,—In one of the annotations in your number of Jan. 13th, you have called attention to the fact that an easily portable case for testing urine at the bedside is still a desideratum. I have recently had one made for me by Mr. Hawksley, which seems to answer the purpose very completely.

The case is about 3½ in. long, a little over 2 in. deep, and not quite 1½ in. broad, so that it may be easily carried in the coat-pocket. It contains three small stoppered bottles (holding about two drachms each) for Fehling's solution, ferrocyanide of potassium, and acetic acid. The stopper is drawn out into a pointed rod reaching to the bottom of the bottle, by which a drop of the contained fluid can easily be removed. The bottles are firmly held in velvet-lined compartments, and the lid, which is padded, presses on the stoppers when the case is closed. Lastly, the case contains an ordinary glass micro-scopic slip, with a shallow cell ground at one end.

It will be seen that I have dispensed with nitric acid, whose corrosive properties render it very difficult to carry about. The acetic acid and ferrocyanide of potassium, however, answer the purpose of precipitating albumen still better, as they throw down not only serum albumen, but also alkali albumen and other modifications which occasionally occur in urine, and give unsatisfactory results with the nitric-acid test. I have adopted Mr. Resteven's suggestion of a glass slip, with the addition of a shallow cell, which has the advantage of preventing the fluid from spreading over the slip in too thin a layer.

The only drawback is the possible cracking of the slip from careless heating over a candle-flame. But if the precaution be taken of applying the heat gradually, this should not occur. The slip, however, can be easily replaced. Heat would only be necessary in testing for sugar, and here the copper is reduced at a temperature considerably below the boiling point of water. In the case of albumen and its derivatives the application of heat is unnecessary. When the urine is turbid from urates, phosphates, mucus, or pus, a single drop of it (all that is wanted) can be immediately filtered on to the slip through a cone of blotting-paper. The slightest opacity produced by the tests can be easily recognised by placing the slip against a black surface (e. g., the coat-sleeve).

The case is not intended to exclude the necessity for more thorough testing at home; but I believe practitioners will find it useful in immediate examinations at the bedside, which, though so often necessary, are frequently neglected from want of appropriate means.

I am, Sir, your obedient servant,

Upper Berkeley-street, Feb. 21st, 1877. JOHN CAVAFÉ.

"DIAGNOSIS WANTED."

Mr. S. Thorp advises "Onychia" to try an ointment of white precipitate, red oxide of mercury, with benzoated lard, and the internal administration of arsenic in the form of a pill—to be taken for a few weeks.

S. T., (Aberdeen.)—1. Fifty pounds may be taken as covering the expense of an outfit.—2. He can quite well live on his pay.—3. Much must depend upon a man's tastes and inclinations, and his expectations in civil practice.—4. The Indian is the most popular of the three medical services.

Mr. Worgan.—If the sum is over two pounds, a stamped receipt may be demanded.

Inquirens must attach his name to his question.

TREATMENT OF GOUT.

To the Editor of THE LANCET.

SIR,—In my short note on the above subject I by no means intended to lay claim to the discovery of any new principle in its treatment, as for many years past pressure and support in all its forms has been in use in every variety of inflammation, acute and chronic, rheumatic or otherwise. "Nihil est remedium quin tempestivo non fiat"; and the essence of the treatment I recommended consisted in its being elastic pressure (and therefore even), and in its being applied early in the oncoming of the disease. In cases of atonic gout, the constant wearing of an elastic stocking will, no doubt, also prevent the occurrence of the attacks altogether.

By the kindness of Dr. King, I have been enabled to read his pamphlet, which I had not seen before, and which is now out of print. He certainly advocates most strongly bandaging and pressure in rheumatic and gouty affections, but nowhere indicates its employment in the definite manner and form to which I drew attention in one of your last year's December numbers, and in which the whole force of my suggestion lies.

Your obedient servant,

Wandsworth-common, Feb. 21st, 1877. H. B. WINTER, M.R.C.S.

MEDICAL RELIEF IN SCOTLAND.

IN the thirty-first Annual Report of the Board of Supervision for the Relief of the Poor and of Public Health in Scotland, 1875-6, recently issued, we find it stated that arrangements have been completed for the distribution of the twenty-eighth Parliamentary grant of £10,000 in aid of medical relief to the poor. The number of parishes which had resolved to comply with the conditions annexed to participation in the grant was 758. Of these, 28 failed to establish their claims to the satisfaction of the Board. The whole sum expended on medical relief to the poor in all parishes in Scotland, whether participating in the grant or not, during the year ending 14th May, 1876, was £36,735 8s. 11¼d., which is equal to 2·62 pence per head of the estimated population of the country. A gradual diminution in the number of persons receiving parochial relief in Scotland is observable; in the past year it was smaller than ever it has been since the Poor-law Act of 1845 came into operation, and this notwithstanding the increase in the population. A curious and not unamusing episode is revealed in the report. It would seem that the Parochial Board of a particular parish, with a population of 1300, and a roll of not less than 25 paupers, resolved to offer a salary of £60 per annum to a medical officer to attend the poor. The vastness of the stipend alarmed the Board of Supervision, and an inquiry was made into the circumstances of the proposed appointment. It was found that no doctor resided in the place, and that "the avowed object of the Parochial Board in devoting so large a sum to the salary of the medical officer was not to benefit the sick poor, but to enable the ratepayers at large to obtain medical aid more easily and at less cost than by employing a practitioner residing in the neighbouring town." The Supervising Board had not the power to control the action of the lesser body in this matter, but gravely admonished it on the exhibition of so much selfishness.

WE are asked to state that, owing to the lamented death of Sir William Fergusson, the ball which was intended to be held in May next for the benefit of the convalescents of King's College Hospital is postponed till next year.

A Beginner.—Dr. Tanner's Diseases of Children.

HYPODERMIC INJECTION OF QUININE IN SUNSTROKE.

To the Editor of THE LANCET.

SIR,—I was on my way out to India when the letter on the above subject from Dr. C. R. Francis appeared in your impression of the 18th November. I have been on the march with troops since my arrival in this country, and did not see that letter till a few days ago.

If Dr. Francis had read my paper (which appeared in the *Practitioner* for March, 1876) before writing, he would have perceived that I did give my friend, Dr. Waller, full credit for having discovered the efficacy of large doses of quinine in heat apoplexy. But Dr. Waller, in his account of the success of his treatment, which was published in the *Indian Medical Gazette*, did not express any opinion as to the manner in which the drug acted. Now it so happened that when Dr. Waller mentioned the subject to me in May, 1869 (before he wrote to the *Indian Medical Gazette*), I was writing a paper on Cholera, which was printed in the *Indian Annals of Medical Science*, March, 1870. It had already occurred to me that the pathological conditions of the secondary fever of cholera and heat apoplexy were very similar. The object of my paper was to try to prove that the cold stage of cholera depended upon irritation or hyperactivity of the vaso-motor nerve centres, and required to be treated by vascular depressants or true sedatives, and I concluded that the converse of that stage—viz., the secondary fever—required nervine tonics and stimulants. I therefore all the more readily determined to follow Dr. Waller's recommendation, as I considered quinine about the best medicine for the secondary fever, and therefore, probably, for insolation. In the paper on Sunstroke above referred to, I attempted very briefly to indicate the mode in which quinine may operate. Professor Binz, of Bonn, in a contribution to the *Practitioner*, June, 1876, on Febrifuges, notices my remarks, but is, apparently, of opinion that the good effects of quinine depend entirely upon its action on the blood-corpuscles. With all due respect for such an authority, I presume that the benefit observed in cases of heat apoplexy following the subcutaneous injection of quinine is so rapid that a strong impression produced on the nerve centres alone is capable of bringing it about, although the action of that remedy on the blood certainly must have a great effect in producing the peculiar advantages conferred by it on sufferers from malarious or paroxysmal fevers. (Of course, heat of skin and dilated capillaries may be caused by stimulation of the vaso-dilators; but I cannot go into that question here. It is generally conceded that there is real exhaustion in insolation.) The temperature of the skin of the patient begins to fall within a few minutes after injection, and it is difficult to imagine that the altered conditions of the blood-corpuscles could be so quickly affected as to occasion the change so soon. However, I hope, should opportunities arise, to make some observations of value bearing upon this point.

I am sorry Dr. Francis did not read my paper. I had the pleasure of meeting him frequently some years ago when he was in Calcutta, and I was at Barrackpore, and he will believe me when I assure him that I do not wish to take away any part of the credit due to our mutual friend, Dr. Waller. But as I am not aware that anyone used quinine subcutaneously for sunstroke before myself in 1869, I brought the advantage of that mode of administering it forward, so that in case a medical man were called to a person comatose from heat, he should not lose valuable time in trying to make the patient swallow, but at once inject the drug hypodermically, by which means a great many lives have already been saved in India; and, even where complete coma does not exist, quinine put under the skin will bring down the temperature to the norm much more rapidly than when given by the stomach, and, applied thus, may consequently prevent those distressing nerve maladies which are sometimes complained of after an attack of heat apoplexy.

I am, Sir, yours truly,

A. R. HALL,
Jhansi, Central India, Jan. 8th, 1877. Surgeon-Major, A.M.D.

CENTRAL IDEAS OF EXCESS.

THE Local Government Board does not approve things that are excessive—more especially does it deprecate excess in the generosity—or, we would rather say, justice—of guardians in the remuneration of their medical officers. It appears that a majority of the guardians of the Lambeth Union had a sufficient appreciation of the duties and responsibilities connected with the care of the health and lives of their poor that they considered £70 a year not too large a sum to pay for the services of the medical officer of the Stockwell district. Forthwith they receive a letter from the Central Board, expressing disapproval of the arrangement on the ground that such a sum was "excessive." Mr. Higgs, Vice-Chairman of the Lambeth Board, will have the sympathy of all right-minded people in the honest indignation which prompted his resolution, which was carried, "That a reply be sent to the upper Board, stating that the guardians were of opinion that the Local Government Board should appoint the medical officers themselves, as the guardians could not get a gentleman for a less salary."

M.R.C.S. Eng.—The revised British Pharmacopœia is now ready, and can be procured at the office, 315, Oxford-street. The Medical Register for 1877 will be ready on Monday, the 5th March.

IF *An Irish Qualified Assistant* will append his name to the letter, it shall be published.

TRACHEOTOMY TUBES.

To the Editor of THE LANCET.

SIR,—In answer to the inquiries of some of your readers, allow me to say that Messrs. Weiss have undertaken to make tracheotomy tubes of the *alloy* I mentioned, also of hard dental rubber strengthened by metal. Messrs. Warne have constructed a soft tube strengthened with canvas, which is superior to the old form.

I think it may be accepted as a rule that materials which withstand the influences to which they are exposed in the mouth for years may be used with safety in contact with animal fluids in other parts. Vulcanite plates are commonly strengthened with gold or platinum. I have seen hundreds so made, wearing well for several years, and have no doubt that a similar result may if necessary be obtained with tubes constructed on the same principle. I proposed German silver because it is cheap, and does not decompose the sulphide of caoutchouc during the vulcanising process. Of course it should be completely covered with the rubber to keep it from contact with the secretions. A material much used by American dentists and by some here is celluloid. Its preparation is to some extent a secret. It is composed of pyroxiline and camphor, which form a peculiar tough, hard material, which can be pressed to any form when heated to a high temperature. It wears well, and is thought by some to be superior to vulcanite. Tubes could be made of it. Nickel, which is now much used for plating instruments, has much greater resisting powers than silver. I believe a tube thickly plated with this metal would wear well.

I am, Sir, yours faithfully,

High-street, Borough, Feb. 14th, 1877. THOS. F. PEDLEY.

PRELIMINARY EDUCATION AND THE PROFESSION.

THE following gems of French translation have been communicated to us by an Examiner:—

"1. Monsieur, je vais la suivre, pour lui continuer les leçons. Sir, I know the thirsty thief, because he attains the lessons.—Ne vous mettez pas en peine. Do you not attain some pain.—Beauté, jeunesse, naissance, honneur, sagesse. Beauty, youngness, nuisance, honour, gentilness.

"2. Enfin, notre dernier recours, c'est que la fuite nous peut mettre à couvert de tout. After receiving our dinner, he was the first one we met including all we have seen.—Il faut qu'une fille obéisse a son père. He will please his daughter for her father's sake."

It is gratifying to know that the gentleman whose French is illustrated in the above answers was not passed by the examiner into the ranks of medical students. The exercise is the more remarkable, as French is one of the optional subjects which a candidate need not touch unless he is so disposed, and thinks himself stronger in it than in Greek, German, or Natural Philosophy. Our informant asks, "Are there not here some reasons, hitherto insufficiently recognised, for the reluctance of foreign Governments to give facilities for practice to English doctors?" We do not think that the promoters of the French Bill have any such good reason for their procedure as is here suggested. We must remember that the gentleman in question was not only not admitted into the ranks of the profession, but was refused admission even to the status of a medical student. Further, we would not publish such facts as the above but for the purpose of illustrating the state of education in the country.

H.—It is both customary and right to charge more for attending *several* members of a family than for attending one. It is not customary to charge more for attendance on infectious cases, unless there is in the cases some urgency or other feature giving unusual trouble to the practitioner.

Dr. Gill is thanked.

WHOOPING-COUGH.

To the Editor of THE LANCET.

SIR,—In your issue of Feb. 10th your correspondent, Mr. Paulson, asks other practitioners for their results in the treatment of whooping-cough by croton-chloral, on which point I am glad to contribute my small experience.

Of thirteen cases I have treated by this drug alone, seven have shown great relief from treatment; in the six others the effect has been too little to warrant a belief in any advantage from it. I have usually begun with doses of from a half to two grains. In four cases out of five I have recently treated with two doses of croton-chloral and two doses of nitric ether daily, I have found great relief, and the effect of the drug has been shown by the return of the severity and the frequency of the cough on the treatment being discontinued.

Your obedient servant,

Flixton, Lancashire, Feb. 14th, 1877. THOS. FIDDES, M.B., C.M.

ADMIXTURE OF WHITE HELLEBORE WITH VALERIAN-ROOT.

PROFESSOR BENTLEY lately read a paper before a meeting of the Pharmaceutical Society on this hitherto unknown species of adulteration, and which has been published in the *Pharmaceutical Journal* for Feb. 10th. A short time back Professor Bentley received a letter from a chemist in a manufacturing town, enclosing a sample of a drug picked out of a parcel sold to him as valerian-root, and detailing the circumstances of the violent sickness and disturbance it had produced in persons who had taken it in the form of an infusion. On examination the article was found to be white hellebore, a pretty powerful poison, as is well known. The wholesale druggists who had supplied it were communicated with, and the explanation they gave was "that the bales of valerian and veratrum had been broken at the docks, the contents scattered about, and carelessly picked up and stuffed in any way." This explanation was not considered quite satisfactory; but there is little doubt that the admixture was accidental, as there is very little difference in the price of the two roots, and therefore no temptation to adulterate. After describing the distinctive characters of white hellebore and valerian rhizomes and roots, Professor Bentley draws two practical conclusions from a mishap that might have been attended with fatal consequences: First, the pressing necessity of an examination of imported drugs by a competent person appointed for the purpose, especially of roots, rhizomes, leaves, &c.; and secondly, the need of greater care in examining drugs in stores and pharmacies.

Mr. J. Lloyd Roberts.—We are not aware of any such work, though there is a great opening for one. Our correspondent can get at the information he wants only by procuring the Reports of the best hospitals on a large scale.

Dr. Henry Morris's paper shall appear next week if possible.

A HINT WANTED.

To the Editor of THE LANCET.

SIR,—Perhaps some "specialist" in throat affections will be kind enough to give a hint as to the treatment of the following case.

My patient, a young man of good constitution, and free from any specific taint, about six months since had an acute attack of tonsillitis, from which he so far recovered in eight days that he was able to attend to his duties. He was then put upon tonic treatment; but the enlargement of the tonsils never entirely disappeared, remaining, as they now are, about the size of a bean on each side, but causing no inconvenience whatever. About a fortnight from the commencement of the attack a perforating ulcer, about the size of a small pea, formed on the top of the left tonsil, in the angle between it and the pillars of the fauces. It has remained, although treated with the ordinary remedies, including the various astringent gargles, iron, quinine, tannic acid and glycerine, iodine painted over, and plugs of cotton-wool saturated with the iodine and put into the cavity, nitrate of silver (solid and in solution), spray of sulphurous acid, &c., together with constitutional treatment of iron and quinine, port wine, and a liberal diet; smoking was also prohibited. The most of these had a beneficial effect at first, but the ulcer never healed; it has ragged, indurated edges, with a distinct areola of redness around and limited by the fauces, but no pain save when exposed to cold. The tonsils are not large enough to suggest excision. The ulcer I believe to be the sole cause of the disturbance, and is the pons asinorum in the treatment.

Any answer through your journal will much oblige,

Yours &c.,

February, 1877. GENERAL PRACTITIONER.

"TOUTING" FOR PATIENTS.

Rusticus.—It would be very improper and unjustifiable in the guardians to appoint a gentleman six miles distant when one at hand is procurable. The behaviour of the rival is, according to our correspondent's account, perfectly indefensible. That a medical man should call on the patients and solicit the clubs of another medical man, makes one think that there exists outside the medical profession a system of "touting," which most medical men are unfamiliar with. It is necessary that those who do such things should know that they are outside the profession.

Surgeon-Major Ringer, (Punjab.)—If we can lay our hands on them, they shall be forwarded.

Dr. C. P. Harding.—It is difficult to do so.

SALT PORK ULCER (?).

To the Editor of THE LANCET.

SIR,—A few years since I was applied to by a patient of mine to treat her for a fungoid and bleeding ulcer on her finger. After some treatment, both internal and external, continued for some time, there was no permanent improvement. I recommended her to go to one of the principal London hospitals, where she was treated for some time without benefit. She then tried another hospital and other treatment, extending over some months; still the ulcer did not heal, and bled profusely on the slightest touch. She escaped my notice for some time; but happening to hear that she was in the habit of eating much salt pork, I fancied this might account for the failure of our remedies. I then called on her again, and proposed to cure her finger, not mentioning what had come to my knowledge, but enjoining her to adhere strictly to a diet of fresh meat &c., but not to eat pork in any form. The ulcer was soon healed, and there has been no recurrence.

I have been recently consulted on a similar case, and fancying I recognised in this ulcer a resemblance to the former one, I asked this patient if she ate much pork, and her reply showed that, like the former patient, she kept pigs, salted her own pork, and ate a large quantity.

There may be nothing in this; but still it is possible that if this almost exclusive form of diet does not produce the pustule and subsequent ulcer, it may account for the tendency of an ulcer in a person of such habit to take on this fungoid and highly vascular condition.

I am, Sir, yours truly,

New Brompton, Kent, Feb. 1877. J. H. MORTON, L.R.C.P. Ed., &c.

Dr. Poinsot (Bordeaux.)—The essence of our English law, as far as concerns the inquiries of our correspondent, is in clause 15, which provides for the *registration*, on condition of certain payments, of every person possessed of the qualifications described in Schedule A of the Act, all the qualifications being such as are granted by British Bodies; and in clause 31, which defines the privileges of *registered* persons thus:—"Every person registered under this Act shall be entitled according to his qualification or qualifications to practise medicine or surgery or medicine and surgery, as the case may be, in any part of Her Majesty's dominions, and to demand and recover in any court of law, with full cost of any medicines or other medical or surgical appliances rendered or supplied by him to his patients." Of course unregistered persons cannot recover. Clause 40 is the principal penal clause, and runs as follows:—"Any person who shall wilfully and falsely pretend to be or take or use the name or title of a Physician, Doctor of Medicine, Licentiate in Medicine and Surgery, Bachelor of Medicine, Surgeon, General Practitioner, or Apothecary, or any name, title, addition, or description implying that he is registered under this Act, or that he is recognised by law as a Physician, or Surgeon, or Licentiate in Medicine and Surgery, or a Practitioner in Medicine, or an Apothecary, shall, upon a summary conviction for any such offence, pay a sum not exceeding twenty pounds." If a foreign practitioner makes it clear that he is a foreign and not a British physician, magistrates have considered that he is not violating the law.

A Sufferer.—We do not make personal recommendations. Our correspondent should consult his usual medical attendant.

VACCINE LYMPH.

To the Editor of THE LANCET.

SIR,—In consequence of the numerous applicants, nearly 100, my supply of vaccine lymph (Monday) is already gone. I shall send as soon as possible what I can to those who have not already received some. I have little doubt, from the wholesale demands, that vaccinators are extravagant in the use of it. By carefully blowing some of the contents of one tube on to a lancet, several children may be vaccinated from it; or the whole can be blown on to a glass, as many arms operated on as required, and the remaining matter taken up on points, and preserved. If one or two children only are to be done, sufficient lymph may be blown out for the purpose, and the remainder shaken back into the tube and resealed.

I remain, Sir, yours truly,

Hastings, Feb. 19th, 1877. CHAS. ASHENDEN.

To the Editor of THE LANCET.

SIR,—Since the publication of my letter, offering to furnish vaccine lymph (in your number of the 10th instant), I have received thirty-three applications for lymph. This shows a great dearth of lymph. I shall be happy to do my best to meet the demands. The majority of applicants have enclosed tubes with envelopes stamped, and their addresses ready written. This is a great convenience, and saves time and trouble. Enclosing tubes furnishes an indication of the requirements of the respective parties.

I am, Sir, yours &c.,

Neath, Glamorganshire, Feb. 17th, 1877. JOHN RUSSELL.

To the Editor of THE LANCET.

SIR,—It appears that there is no provision in the Vaccination Act to compel persons to allow lymph to be removed from a child's arm, or to punish those who will not allow it to be taken. I should much wish to know what is to be done in such cases of refusal. I am a public vaccinator for a large district, and continually having my supply stopped from this cause. Clearly the law is defective in this, and in the present scarcity of vaccine lymph it is a most serious matter. Any light you can throw on this matter will greatly oblige,

Yours obediently,

Staunton, near Gloucester, Feb. 21st, 1877. ROBT. W. CHELY.

To the Editor of THE LANCET.

SIR,—I see by various communications in the medical journals that there seems to be a want of vaccine lymph. I will supply it at sevenpence per tube, the same as I use for my patients, to any medical practitioner. Stamp to be enclosed with note of application.

I am, Sir, yours obediently,

JOHN MARTIN,

Senior Physician, Belfast Dispensary.

9, Clarence-place, Belfast, Feb. 14th, 1877.

ANTI-VIVISECTIONISTS' TRACTS.

A CORRESPONDENT says he has paid twopence three times in the last few weeks for nonsensical tracts against vivisection. That is certainly much more than they are worth, and we should advise our correspondent to take better care of his pence.

Ask.—The appointments being made by the local authority, it is difficult to understand how, in the present state of the law, the central authority can intervene.

Inquirens.—Dr. Murchison's work.

SUBJECTS FOR DISSECTION.

To the Editor of THE LANCET.

SIR,—Can any of your readers tell me whether there is any remedy at law against the authorities of a medical school for undertaking to teach anatomy, and failing to obtain a supply of subjects for dissection, or for omitting portions of the lectures prescribed in any particular class? In fact, when a student has paid his fees, has he any remedy against the school authorities if they fail to provide the instruction for which they have been paid? It seems to me, if the examinations are to be increased in severity, the teaching ought to bear some proportion to the examinations, or else medical education is all one-sided, and the teaching requires reforming as well as the students.

Your obedient servant,

Feb. 14th, 1877. CHIRURGICUS.

SEWER GASES.

PROFESSOR FRANKLAND has made another contribution to sanitary science by stating his conclusion, after repeated experiment, that sewage, in flowing through a sewer, however unpleasant the odour may be in the locality, cannot be sufficiently agitated to impregnate the circumambient air with suspended particles. But if sewage becomes stagnant, fermentation ensues, and the bursting of myriads of minute bubbles throws into the air particles of zymotic matter. If, therefore, sewage is constantly passing at a fair rate through the sewers, the air therefrom will be comparatively harmless; but if it be allowed to remain long enough to putrefy, danger to health may arise.

ONE WAY OF COMMENCING PRACTICE.

THE following is the advertisement with which Dr. Dickinson, of Dawlish, prefaces his testimonials. It is amazing that men in the medical profession should so misunderstand what is becoming, not to say modest. We are sure that none of the Irish Bodies from which his qualifications have been obtained, and none of the gentlemen whose testimonials he appends, will read the following without regret. Dr. Dickinson should have said by whom he had been so ill-advised:—

"Dr. Dickinson in commencing practice as a medical man in this neighbourhood, where he has not been personally known, has been recommended to introduce himself by means of the enclosed testimonials, received by him from the gentlemen whose names are appended. The object of this is that thus he may make known his qualifications to those families who may be induced to employ him, so that they may have full confidence in his status and merits as a physician and surgeon.—Dawlish."

E.—We have perused our correspondent's kindly and well-written letter. She will not perhaps think it necessary for us to publish it on glancing through our columns this week.

Enquirer.—It would seem reasonable that the proportion of expenses borne by each partner should accord with his share of the profits; but the matter is one for arrangement.

Mr. Chas. Williams should apply to Dr. Billing, at the Hygienical Department for the Army, Washington.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. B. Yeo, London; Mr. Walter Rivington, London; Mr. Lawson Tait, Birmingham; Dr. Leake, Kensington; Mr. H. Morris, London; Mr. Lamond, Glasgow; Mr. Muir, Linlithgow; Mr. Mahony, Hackney; Dr. Cavafy, London; Dr. Churton, Leeds; Dr. Gillespie, London; Dr. Cuthbert, Edinburgh; Mr. W. Smyth, London; Mr. Bryden, Stockport; Dr. Ashe, Dundrum; Mr. Russell, Neath; Dr. Sturges, London; Mr. F. A. Allen, London; Dr. Poinsot, Bordeaux; Mr. J. A. Pitman, London; Mr. Martin, Belfast; Mr. Fenton, Coventry; Mr. Hellier, London; Dr. R. Alexander, Bradford; Dr. Fiddes, Flixton; Messrs. Burgoyne and Co., London; Dr. Maunsell, Liverpool; Mr. Da Gama, Bombay; Dr. Benedikt, Vienna; Dr. Neale, St. John's-wood; Mr. Billes, London; Mr. Edwards, Anglesey; Dr. Wardell, Tunbridge Wells; Dr. Will, Aberdeen; Dr. Harding, Whitchurch; Dr. Gill, Folkestone; Mr. Kebbell, Flaxton; Mr. Taylor, Emsworth; Mr. Thorp, Sible Hedingham; Mr. Footner, Tunbridge Wells; Mr. Bolton; Dr. Oswald, Scarborough; Mr. Whitford; Mr. J. Millikin; Mr. Dance; Mr. Newling; Dr. Fussell, Brighton; Mr. Steinthal, Manchester; Dr. Jones, Cardiff; Dr. Oates, Birmingham; Mr. Morrison; Mr. Potts; Dr. Asbenden, Hastings; Dr. Iles, Fairford; Mr. Glutton; Mr. Wynter, Wandsworth-common; Mr. Ormsby, Dublin; Mr. Hay, Hull; Mr. Cecly, Staunton; Mr. Walington; Dr. Priestley, Halstead; Dr. Jones, Llanelly; Dr. Williams; Mr. Davidson; Mr. Dixon Mann, Manchester; Dr. Morton; The Registrar of the Royal College of Physicians; H. H. R.; A Constant Reader; M.D.; Inquirens; M.R.C.S., L.S.A.; T. H. W.; W. P.; A General Practitioner; Surgeon-Major, Punjab; A Subscriber; S. T.; J. H. S.; Tradesman; A Sufferer; Chirurgus; A Beginner; Iota; Enquirer; Beta; Secretary; Registrar-General; W. N.; J. M. D.; M.B., Brighton; An Irish Qualified Assistant; M.B., Oundle; P. N.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from — Dr. Batteson, Bow; Dr. Collins, London; Mr. Wotherspoon, Paisley; Mr. Leman, Chipping-Sodbury; Mr. Merryweather, Guisborough; Mr. M'Callum, Ayr; Messrs. Hall and Co., Brighton; Mr. Noble, Kendal; Mr. Collinson, Woodstock; Dr. Muscroft, Pontefract; Messrs. Brady and Martin, Newcastle; Mr. Dunn, Maryborough, Australia; Mr. Essex, Pontypool; Mr. Parry, Ferndale; Mr. Hall, Wigan; Mr. Wilcock, Eastbourne; Dr. Parrott, Hayes; Mr. Hinchcliffe, Shrewsbury; Mr. Whitaker, Derby; Mr. Davies; Dr. Serjeant, Manchester; Mr. Leslie; Dr. Hannagan, Clonmel; M.D., Kilsyth; K. K., Great Hadham; M.D., Lewisham; Medicus, Liverpool; M.R.C.S., Hereford; T. L. G.; X., Birmingham; J. K.; G. M.; X. K. Q.; Surgeon, Dublin; Delta, West Hartlepool; M. M.; X. Y.; Omicron, Barton-upon-Trent; X. Y. Z., Dorchester; B. S. T., Sparesbrook; Medicus, Birmingham; Felix; Medicus, Sheffield.

Widnes Guardian, Newcastle Daily Chronicle, Western Morning News, Morning Mail, Pharmaceutical Journal, Solicitors' Journal and Reporter, Sunday Times, Welshman, Broad Arrow, Examiner, Manchester Guardian, Spectator, Daily Post, Leeds Mercury, Academy, United Service Gazette, Surrey Advertiser, Metropolitan, South London Chronicle, Worcestershire Chronicle, Canada Lancet, East London Observer, Eastbourne Standard, Record, Melbourne Medical Record, South Wales Daily News, Macclesfield Courier and Herald, and *New York Medical Record* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, FEB. 22ND, 1877.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall	Remarks at 8 A.M.
Feb. 16	29·81	WNW	41	43	....	51	41	·094	Cloudy
„ 17	29·98	N.W.	41	44	....	50	40	....	Cloudy
„ 18	30·11	N.W.	44	46	....	50	42	....	Cloudy
„ 19	29·92	W.	42	43	....	48	41	0·14	Overcast
„ 20	29·14	N.W.	38	40	....	46	37	0·26	Stormy
„ 21	29·77	N.	35	39	....	43	36	0·12	Cloudy
„ 22	30·07	N.	35	37	....	41	34	....	Cloudy

Medical Diary for the ensuing Week.

Monday, Feb. 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. W. K. Parker, "On the Osteology of Birds."
MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Thomas Churton (of Leeds), "On the desirability of formally naming any existing Diathesis in Cases of Acute Disease." — Dr. Robt. J. Lee, "On a Method of Treatment of Cases of Empyema, with a description of a proper Instrument for the same."

Tuesday, Feb. 27.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Mr. Morrant Baker, "On Necrosis without Suppuration, with a Case of Intra-osseous Necrosis of the Femur without Suppuration, for which Amputation at the Hip-joint was performed."—Mr. Spencer Wells: "Three Hundred additional Cases of Ovariotomy, with Remarks on Drainage of the Peritoneal Cavity."

Wednesday, Feb. 28.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. W. K. Parker, "On the Osteology of Birds."
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Gulstonian Lectures: Dr. Lauder Brunton, "On Pharmacology and its Relations to Therapeutics."
HUNTERIAN SOCIETY.—8 P.M. Dr. Woodman, "On Herpes Zoster from a practical point of view."
ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.—8 P.M. Council. —8½ P.M. Ethical Meeting. Mr. J. A. Salter, "On certain Ethical questions involved in the practice of Dental Surgery."—Other communications.

Thursday, March 1.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HARVEIAN SOCIETY.—8 P.M. Dr. Wynn Williams: "Cases of Hydatids of the Liver."—Dr. Mahomed: "A Contribution to the Accurate Diagnosis of Aortic Aneurism."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8 P.M. Annual Meeting: Report, Election of Officers, and Address of the President.

Friday, March 2.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. W. K. Parker, "On the Osteology of Birds."
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Gulstonian Lectures: Dr. Lauder Brunton, "On Pharmacology and its Relations to Therapeutics."

Saturday, March 3.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

TERMS FOR ADVERTISING IN THE LANCET.

For 7 lines and under ..... £0 4 6 | For half a page £2 12 3
For every additional line ... 0 0 6 | For a page 5 0 0

The average number of words in each line is eleven.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.

N.B.—All letters relating to Subscriptions or Advertisements should be addressed to the Publisher.

Agent for the Advertising Department in France—
Mons. DE LOMINIE, 30B, Rue Grenelle St. Germain, Paris.